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THE GENTLEMAN'S MAGAZINE FROM 1731 TO 1868.

EDITED BY

GEORGE LAURENCE GOMME, F.S.A.

ARCHÆOLOGY: PART I.

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INTRODUCTION.

THIS volume begins a new section of the vast quantity of interesting and valuable material printed in the old *Gentleman's Magazine*, and I venture to think that there are many who will be glad to have before them in a collected form these hitherto scattered papers on prehistoric and early historic archæology. Some of them are the work of scientific archæologists. It is important, however, to bear in mind that many of these contributions do not meet the requirements of modern science ; they are disfigured by theories never very profound, and chiefly connected with the Druids, to whom all objects not historic seem to have been referred for an origin, except perhaps the amusing instance recorded on p. 142. Finally, they are not always complete or exhaustive. But, on the other hand, it is important to science to know where archæological discoveries, however fragmentary and apparently insignificant, have been found ; to know the condition of certain well-known monuments at particular dates ; to know what the treasure-seeker and unscientific explorer have done in the past to plunder or injure objects which in these days are of surpassing importance. Many deplorable instances of destruction occur in the following pages. Scientific men have frequently lamented the want of support which the Government gives to the exploration and description of the archæological remains of this country ; but in the following pages it would seem that they have to lament also that the officers of the Government have occasionally acted as iconoclasts. The Ordnance Survey Department, by whom so much might have been accomplished with very little labour and expense, have succeeded in driving their station-posts into the tumuli

and barrows of the Cleveland district (see p. 237), just as they recently placed their "bench-marks" on the stones and crosses of Cornwall (see "Proc. of Society of Antiquaries," vol. x., 1885, p. 259.)

Perhaps the worst kind of vandalism is that recorded in the magazine for 1788, p. 1117, as follows :

"At General Conway's, Park Place, a new structure is reared—a Druid temple, sent piecemeal from the States of Jersey, where it was lately found by the Governor, General Conway, as new ground was raising for their defence. The magnitude of the stones is such that the mechanic wonders. Those who look to objects higher than are attainable by the mechanical powers will not here look in vain."

But bad as all this, I think it is qualified somewhat by a magnificent testimony which is borne to the influence of such a good antiquary as Dr. Borlase. On p. 90 we read, and it is well worth reprinting in this preface :

"The doctor's fame was so great, and so much was he respected, that many probably shrank from attempting to follow in the same path ; and so implicit was the faith in him that it was considered he had described everything in the county worthy of notice. A practical illustration of this sentiment occurred not long ago. In a western parish of Cornwall, some labourers were employed in enclosing waste land, when they came across a stone circle, and suspecting it to be akin to others popularly held in veneration, they hesitated to destroy it, and appealed for advice to a mine captain, who decided that if noticed in Borlase it should be preserved, if not, it should be demolished. The doctor's "Antiquities" being referred to, and no mention of the circle found, it was at once cleared away.'

Of course the practical result was deplorable enough, but the sentiment recorded does honour to the Cornish labourers, and only heightens the regret all must feel that no one in all Cornwall had been found to continue Dr. Borlase's work. Now, however, the causes of this regret are being rapidly removed. The Rev. W. C. Lukis's noble book on the *Prehistoric Stone Monuments of the British Isles : Cornwall*, is the first instalment of what must ultimately prove of incalculable value ; and speaking particularly of Cornwall, there are good antiquaries now who are getting information together which only local authorities can obtain, the Penzance Antiquarian Society being specially active, the Rev. S. Rundle having made a complete list of the antiquities of Godolphin, and the Rev. W. S. Lach-Szyrma, in his presidential address for 1885-1886, having made a strong appeal

for the compilation of similar lists for all the parishes of Cornwall (see *Antiquary*, 1886, vol. xiii., p. 33).

It has been extremely difficult to classify upon a satisfactory basis all the papers reprinted in this volume. Some from insufficient data, some from possibly false conclusions, others from an indefinite or meagre description, no doubt more properly belong to other periods of archaeology; while in such examples as that given on p. 34 I have thought it best on general grounds to include the survival among the archaic originals. Unless I had taken upon myself to investigate the accuracy of each contribution according to the latest researches, I do not know how these difficulties could have been overcome; and the plan of these reprinted collections from the old *Gentleman's Magazine* does not allow and does not require such an extensive editorial labour. On the other hand, I do not hesitate to affirm that these drawbacks to strictly scientific accuracy will not affect injuriously the general value of the volume; and, moreover, they are to a considerable extent incidental to such an undertaking as the present. I always let each contributor to the old magazine speak for himself in his own spelling, under his own title, and it is thus only, I submit, that the scientific worker will gauge the true value of what is here collected together for his use.

Before passing from these general considerations, it is not unimportant to note that, while with the four folk-lore volumes which have been already issued, most of the important papers belonged to the early issues of the magazine, where folk-lore is recorded as items of curiosity and amusement, the important papers on archaeology occur chiefly in the later issues. Early archaeological contributions of any value are rare; and as we get down to later years, the interest and importance of the subject increases rapidly, until at the date we conclude we are fairly launched into the midst of great archaeological activity, only to be stopped, so far as the *Gentleman's Magazine* is concerned, by a discontinuance of the old plan of publication.

The first section is devoted to Geologic and Prehistoric Remains. Fossil antiquities form the opening portion of the section. The paper on "Submarine Forests on the Norfolk Coast" (p. 5) is one of some considerable interest, throwing additional light upon the statement made by Professor Boyd Dawkins in his *Cave Hunting* (p. 263), that "the area of Great Britain was greater in the prehistoric age than now, since a plain extended seawards from the coast-line, nearly everywhere, supporting a dense forest of Scotch fir, oak, birch,

and elder, the relics of which are to be seen in the beds of peat and the stumps of the trees near low-water mark on most of our shores. And it may be inferred that the forest extended a considerable distance from the present sea margin, from the large size of the trunks of the trees." The mention of the discovery of a flint axe-head being embedded in one of these submerged forest trees (p. 6) shows, too, that ancient men trod these now hidden spots. This paper is followed by those on extinct animals in Ireland and fossil animal remains, a subject that may be followed up by a study of Owen's *British Fossil Mammals and Birds*, Harting's *British Animals Extinct within Historic Times*, Watkin's *Gleanings from the Natural History of the Ancients*, and Hehn's *Wanderings of Plants and Animals*, lately so admirably translated into English by Mr. J. S. Stallybrass. We next come to the important section on "Cave Remains." Professor Boyd Dawkins's well-known work on *Cave Hunting* is the principal authority on this subject. On p. 13 he says: "The first bone cave systematically explored in this country was that discovered by Mr. Whidbey, in the Devonian limestone at Oreston, near Plymouth, in 1816 (Phil. Trans., 1817, p. 176)." Although I suppose the instances reported to the *Gentleman's Magazine* in 1785, 1805, and 1810 cannot in any way be considered as systematic explorations, it is interesting to note these early examples of cave-hunting, and as Professor Boyd Dawkins does not mention in his valuable work all the instances given on pp. 22-36, I have thought it would be instructive to add in the notes a tabular statement of cave explorations mentioned in this volume compared with those given by Professor Dawkins. Upon this most interesting subject I may also refer to Buckland's *Reliquiae Diluviae*, and to a very important work published in 1884, *The Bone Caves of Ojcow in Poland*, by Professor Römer.

I have ventured to call the next section Early Historic Remains. "Ancient Timber Foundations" is my own title for what I have thought might prove to be remains of Lake Dwellings, though there is not much to support that supposition from the evidence of the various writers. Still, the remains here reported (pp. 39-43) may be suggestive of what may be hoped for from future explorations. The paper "On the Naval Power of the Ancient Britons" (pp. 43-51) is prefatory to the succeeding record of the finding of "Ancient Boats and Canoes" (pp. 51-57). All of these finds are not British, though probably those instances of boats being hollowed out of a single tree may be referred to pre-Roman times. The other instances, though

doubtless much more modern, are best printed here I think. The subject is a very enticing one, and has of late years been of much interest, owing to the finding of an ancient Viking's ship in Norway, in 1880. A description of this is to be found in the *Antiquary*, vol. iv., pp. 254-256, and Mr. J. Harris Stone reported the find to the British Association. From this report I think the following quotation may be made, as it illustrates the finds mentioned in this volume :

"Instead of an antiquated, rudely constructed, and roughly finished vessel, with primitively drawn lines, it was a smart, trim-looking craft, built on what a sailor would call beautiful lines, and was admirably adapted as well for speed as for general seaworthiness. It was difficult to conceive of such a fresh-looking and well-preserved ship being, as it was undoubtedly, about a thousand years old. He feared that the discovery of this ancient galley had not given them any argument in favour of the theory of the growing superiority of mankind in all branches of knowledge and industry. The name of the Viking owner of this ship was not known. All that could be said was that he lived at some time during the period from the end of the eighth to the middle of the eleventh century, and that when he died he was buried in his vessel, which was drawn up on land, and had a mound of earth thrown over it, which, luckily for posterity, consisted of blue clay. The vessel was now at Christiana. It was excavated at Gogstad, Sandefjord, about half a mile from the present seashore. In this ship the sepulchral chamber in which the Viking's body had been deposited was situated amidships. It was tent-like in shape, made of logs placed side by side, leaning and meeting on a ridge, the side running parallel with the main axis of the ship. The mound appeared to have been entered, no doubt for the purpose of plunder, for none of the Viking weapons were found, and only a few of his bones were discovered. There were found in the sepulchral chamber the bones and feathers of a peacock, the bones of a little dog, some fish-hooks, and several mountings to belts and harness. Round about the ship were discovered the bones of some nine or ten horses and dogs, which had been sacrificed at the time of burial. The vessel was 77 feet 11 inches in length between the rabbets at the gunwale, and at the widest part 16 feet or 17 feet across. From the top of the keel to the gunwale amidships she was 5 feet 9 inches deep. She would draw probably not 4 feet of water, and she had twenty ribs. She was clinker built, and her planks slightly overlapped, like slates on the roof of a house. Her lines were calculated for swiftness as well as for seaworthiness. The planks and timber of the frame were fastened together with withes of tree roots. The bent timbers seemed to be naturally grown, and not artificially bent. The

boards of the sides were of good, sound, well-seasoned, and selected oak, about $1\frac{1}{2}$ inches in thickness. They were smoothly planed, and firmly riveted together by iron rivets, which had been carefully clinched on either side. There were also a few oaken bolts near the upper part of the sides. He could find no trace of a saw having been used anywhere about the vessel. The planks had their edges moulded. The mouldings consisted of indented lines running down the length of the planks near the lower margins. Bow and stern were of similar shape. They were painted, and must have risen a considerable distance out of the water. The top of each was broken, so that it could not now be determined whether she originally carried a figure-head or not. The keel was deep, and made of thick oak beams. He could not see whether any metal keel had been fastened to the bottom. An iron anchor found with the vessel had so rusted away that it could not be preserved. There was no deck to the galley, and the absence of seats for the rowers was notable. The flooring could be lifted to allow of baling out water. The oars were 20 feet long, and the oar-holes, sixteen on each side, had slits towards the stern of the vessel to allow the blade to pass through from the inside. The most interesting thing about the ship was the rudder, which was on the starboard side a foot or two from the stern. Starboard was a corruption of the word 'steerboard,' which no doubt owed its origin to the ancient position of the rudder, as in this galley. This rudder resembled a large oar, consisting chiefly of blade and a short handle. It was fixed not to the side of the boat directly, but to the distal end of a piece of conical wood, which projected about a foot from the vessel. This piece of wood was bored down its length, and no doubt a rope passing through it secured the rudder to the ship's side. The steering was effected by a tiller fixed in a hole at the upper end of the handle portion, and probably also by a rope fastened at the lower end of the blade. It was hoped that the correct shape of this galley, which was photographed, would rapidly circulate among artists, and for ever put an end to the curious drawings and paintings of the Viking galleys. The vessel had one mast. In the mound were also found parts of three small oaken boats, generally like the galley itself, large well-made sheet copper caldron, a few bedsteads like those used in Norway in the present day, some drinking-cups and tubs, and some pieces of carved and painted wood, the use of which is uncertain. Several large round shields of thin wood were also found. These could not have been for defence, but must have been for ornament. A landing-stage made of oak was also found in the mound. The surface of this plank is carved ornamentally, to prevent slipping, and many on seeing the photographs and diagrams would turn their thoughts to the Bayeux tapestry in Normandy, in which were numerous representations of galleys similar to the one now described. The discovery of this galley throws a flood of quite

unexpected light upon a period of history which is, perhaps, as dark and obscure as any during historic times."

The remaining portion of this section is devoted to finds of stone and bronze implements—a subject that has become well-known through the two famous works of Dr. Evans, *Ancient Stone Implements* and *Ancient Bronze Implements*. As Dr. Evans's books are the text-books on the subject, I have thought the following tables, showing the places where finds recorded in the following pages (pp. 57-76) are also mentioned by him, would be useful.

ANCIENT STONE AND FLINT IMPLEMENTS.

Place where Found.	Date of Find.	Pages in this Volume.	Pages in Dr. Evans's "Ancient Stone Implements."
Brimington, Derbyshire (in a field)...	1778	60	
Boffington, Hants (in marsh land called Sickmarsh)	1783	61	
Near Ripon	1783	61	
Cumberland, north of (in a rivulet) ..	1789	59	
Guthrie, Forfarshire	1797	62	
Wolfardesworthy, Devon	1797	63	316
Clayton Windmill, Sussex	1805	64	68
Garthorpe, Leicester	1815	71	
Claremont, near St. Andrew's	1823	64	
Sutton Courtney, near Abingdon	1826	75	
Blackaddes, Berwick	1831	191	347
Gristhorpe, Yorkshire	1834	157	252, 355
Near Filey, Yorkshire	1835	161	
Barkisland, Halifax	1838	72	
Norfolk coast (in submerged tree) ..	1845	6	
Driffield, Yorkshire	1862	65	252, 294, 383, 409
East Bolton, Northumberland, newly ploughed moorland on left bank of River Aln	1863	65	
Hauxley, Northumberland	1863	65	
Kyloe, Northumberland	1863	65	
Castleton, Yorkshire	1863	66	
Danby, North Moors	1863	66-69	189
Cleveland, Yorkshire	1861-63	213, 226, 229, 237, 248, etc.	
Yorkshire Wolds	1866	114, 123	69, 80, 199, 223, 236, 262, 265, 270, 273, 277, 286, etc.
Caithness	1866	178	118, 197, 198, 263, 346, 351, 398, 404

ANCIENT BRONZE IMPLEMENTS.

Place where Found.	Date of Find.	Page in this Volume.	Pages in Dr. Evans's "Ancient Bronze Implements."
Copgrove, Yorkshire	1789	284	
Burrington Coomb, near Stanton Drew	1805	22-23	
Hollingbury, near Brighton... ...	1825	73, 147	76, 115, 378, 386, 390, 464 282
River Lark, near Bury-St.-Edmunds ...	1826	73	
At bottom of River Isis	1826	75	
Common between Fulbourn and Wilbraham...	1830	73	279, 282, 320, 340, 464
Rosebery Topping, Yorkshire ..	1831	202	129, 172, 174, 178, 397, 424, 468
Whitfield, near Hereford	1833	58	
Gristhorpe, Yorkshire	1834	154, 156, 159	228
Nockavrinnion, Antrim	1835	74	
Northwold, near Stoke Ferry, Norfolk	1838	139	270, 282, 305, 314, 465
Laugharne, Caermarthenshire ...	1842	193	
Rayne, Essex	1844	74	
Churwell, York	1846	74	
Oxenham, near Exeter	1846	74	
Romford	1852	143	86, 172, 424, 467
Colleonard, Banffshire	1857	76	56, 58
Cleveland, Yorkshire	1861-63	226, 244	447, 468
Fyvie, Aberdeenshire	1862	189	
Standlake and Yarnton, Oxfordshire	1862	301, 303	380
Saverough, Orkney	1862	182	
Swinton, Yorkshire	1863	167	
Yorkshire Wolds	1866	115, 118, 119, 121	391, 473
Caithness (Yarrows)	1866	178	

The next section is devoted to "Sepulchral Remains"—a subject that is perhaps the best known of all early archaeological studies. Sir Richard Colt Hoare and Mr. Cunnington in *Ancient Wiltshire*, Mr. Bateman in *Ten Years' Diggings in Celtic and Saxon Grave-hills in the Counties of Derby, Stafford, and York*, Canon Greenwell in *British Barrows: an Examination of Sepulchral Mounds*, and Professor Rolleston, Dr. Thurnham, and Dr. Beddoe in various works, have brought together a mass of information, which enables the student to proceed from the "digging" and "discovery" stage to that of classification and systematic study. The Gloucestershire barrows

described in pp. 130, 131 can be compared with Mr. G. B. Witt's admirable archaeological handbook to Gloucestershire—a book which ought to have its counterpart in all the counties. The finds recorded in the *Gentleman's Magazine* are of interest, as they mention very often the first exploration into some barrows, and they at all events place on record some additional information which must be in many ways valuable.

The final section of the book I have named "Encampments, Earthworks, etc." It is intended to include those archaeological remains which, either from their size, peculiarity of construction, or great extent in number or area, afford evidence, not only upon the burials, but as to the settlement of the early races of this island. It opens with an anonymous paper on "Traces of our Remote Ancestors," which is followed up by the same writer by papers on "Diggings into Celtic Grave-Places in the Cleveland District of Yorkshire." These papers are by the Rev. J. C. Atkinson, and their reprint will be recognised by all antiquaries as a great boon. Mr. Atkinson wished to give me some notes pointing out that though his facts still stand, some of his inferences must now be modified; but other literary labours intervened, and the papers stand here as they were originally printed. The following notes, however, Mr. Atkinson has kindly favoured me with, and I gladly avail myself of his permission to print them:

Page 202. End of paragraph requires much modification.

" End of second paragraph. I have found *many* bone pins, a perforated ditto, a curious bone fastener, etc.

Page 204. The lower half of the page, from "All these sets," etc., is erroneous in view and mistaken as to the facts.

Page 205. All, as I think now, mistaken.

Page 206. The tumulus *is* as much sepulchral as any other, and had *no* connection with the religious, etc.

The settlement at Westerdale is neither more nor less than a group of pits, created by digging down (say, about 1100 or 1150 at the earliest) on to the ironstone ("main seam"), 10 or 11 feet deep!! Snowdon Nab ditto, except that the stone worked there was *not* the "main seam." Probably (I have not ascertained it) Stone-haggs is just the same: there are large iron-stone works in Rosedale just by.

We then pass on to the discovery of camps and mounds of various descriptions and in various parts of the country, all of which are of

interest to those who care to dip into these subjects. They do not require any comment here, because in the various archaeological societies—and nearly all the counties now possess some organization of the sort—they are frequently discussed and visited.

One of the most important works upon the results of a systematic examination of the barrows and tumuli of Great Britain is the well-known *Crania Britannica*, by Mr. J. Barnard Davis and Dr. Thurnham, published between 1856 and 1865. In October, 1853 (p. 386), Mr. Davis addressed a letter to the *Gentleman's Magazine* on the subject of collecting and preserving ancient skulls, and as his pregnant words of caution are still, alas! much needed, it will be well to print his letter here.

“THE PROPOSED ‘CRANIA BRITANNICA.’

“MR. URBAN,—In the preparation of the ‘*Crania Britannica*,’ a projected work to be issued by private subscription, which you have honoured with a very brief notice in the number of your magazine for November last, p. 493, the collecting of skulls of various ages and races has become a matter of great importance—indeed, a very pressing need. As such objects are met with in most parts of the kingdom, but are commonly thrown aside or destroyed, it has occurred to me to write out a few simple directions, which, although rather meagre, may prove sufficient to save them for use. These, at the suggestion of one of your most learned contributors, and a kind friend to our undertaking, I beg to enclose. It would give me the greatest pleasure to give any additional information to any gentleman possessed of such objects who will favour me with a communication.

“Yours, etc. J. BARNARD DAVIS.

“Shelton, Staffordshire, Sept. 17, 1853.”

“*Hints for Collecting and Preserving the Bones of Ancient Skulls.*

“The remains of the skeletons, and especially the skulls, of the early races of men inhabiting the British Islands, have become objects of interest to those who have made them their particular study. It unfortunately, however, happens that persons engaged in opening barrows, and making excavations for antiquities, even those well instructed in other respects, generally fail in procuring skulls in such a state as to be of any use for purposes of science. Attention to the following brief instruction will prevent that destruction and loss of such objects which too usually prevails. It must be recollect ed that it is the whole of the bones of the head and face,* including lower

* The slender bones of the nose, when remaining, should always be carefully retained and protected from injury; they are very characteristic.

"jaw and teeth, which the anatomist requires for his researches, not a few fragments, or the mere brain-case : at the same time, where the bones are fractured or disjointed, if every fragment, or nearly every fragment, be recovered, he will be able to rejoin them, and re-construct the cranium.

"Whether it be a barrow, cairn, or cemetery of any kind that is undergoing examination, as soon as a proximity to the skeleton is ascertained, and it is always advisable to proceed from the feet towards the head, the pickaxe and shovel should be laid aside ; the stones and soil must be carefully removed with a garden trowel, the digger* employed by entomologists, and the hand, so as to expose the head perfectly.

"No attempt should even now be made to lift up the skull, until the earth has been cautiously removed all round it, so as to make it entirely free ; it may then be gently raised up, and placed upon a sheet of soft paper, the superfluous soil picked out, the bones wrapped up immediately, and the package tied with string.

"Where the skull has been fractured by the pressure of the earth, and the bones of the face crushed and displaced (for it is these which yield first, yet in most cases they are merely dislocated, not destroyed), every fragment, however small, and every tooth, should be diligently gathered up, and the whole wrapped in a sheet of paper, as before.

"' All, all have felt Time's mighty wand,
And, brought again to light,
Defaced, despoil'd, can scarce withstand
The touch, however slight.'

"It is best immediately to inscribe on these packets the name of the barrow, and a number, to distinguish each skull disinterred, which may at first be done with a pencil. As soon as possible afterwards this should be written in ink, and the same number marked with the pen upon the skull, or on two or three of the fragments where it is broken.

"In all cases the position in which the skeleton lies should be accurately observed and noted down, whether extended on the back or side, or flexed, that is, with the knees drawn up, and the direction of the compass in which the head is laid. The relics accompanying the body, whether urns, implements, weapons, lamps, coins, etc., should always be carefully preserved, as they frequently indicate the people and the period to which the interment has belonged.

"The safest mode of transmitting ancient skulls is to pack gently and neatly any number of the parcels, made in the manner above

* Formed of a piece of strong iron wire, bent nearly into a semicircle at one end, and the other straight extremity being fixed into a wooden handle. The point of the semicircular end should be spear-shaped.

"directed, in a box with a little hay. The elasticity of this substance "is a perfect protection to the fragile bones during carriage."

I have not inserted any of the numerous reports of archaeological societies, because the papers will be found in the transactions of those societies. Besides these the following papers are not printed, as they were not, in my judgment, of sufficient value :

1762, p. 155; 1787, pp. 463, 781, 969, 1071; 1788, pp. 31, 383, 694, 952; 1792, p. 25; on the petrifaction of human bones.

1785, pp. 191-193; accurate description of antiques recommended by a barrowist.

1799, p. 117; fossils at Guildford [a collection carved into modern figures].

1807, Part II., p. 818; Donovan's Museum of Fossils.

1813, Part I., pp. 499-500; cave [modern hermit's] discovered in Standard Hill, Nottingham.

1822, Part I., pp. 491-494; the wonders of the antediluvian cave.

1831, Part I., pp. 20-22; geological effects of the deluge.

1832, Part I., pp. 15-16, 135-139; British geology.

There are two papers which I left out, but which should have been included in the notes. Summarized, they are as follows :

1847, Part II., p. 526. Workmen engaged in excavating the bank of the river at Springfield, near Glasgow, came upon a wooden formation at a depth of 17 feet below the present level, which on being fairly dug out was found to be the remains of a canoe made of Scotch oak, in one piece, and undoubtedly formed by scoping out the trunk of a very large tree. Its length is upwards of 11 feet; the prow is sloped, but the stern is of heavy uncouth formation. It is about 18 inches in breadth, and of proportionate depth, and when afloat on the water would be capable of accommodating two or three persons. It was found in a bed of sand.

1855, Part I., pp. 630, 631. An extract from the *Illustrated London News* giving an account of the opening of the great tumulus at St. Wenant's, Hereford, under the direction of Mr. Thomas Wright.

It is to be regretted that the plates accompanying the text of the papers in this volume could not have been reproduced; but that was not possible, and it can only be remedied by collectors inserting in these volumes the original plates. The second part of this Archæo-

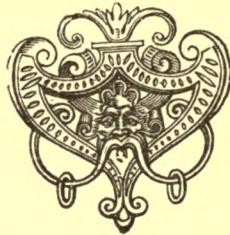
logical series will deal with Stone Circles, Miscellaneous Objects of British Antiquity, and Anglo-Saxon Antiquities.

The writers in the present volume include some of the best known antiquaries. To Mr. C. Roach-Smith I must acknowledge my special indebtedness for the very kind manner in which he met my request to use the valuable communications he was wont to send up to the old *Gentleman's Magazine*. Not only did he say "Yes," but he offered most generously to send me any annotations I might require, an offer which, when I come to the volume on Roman remains in Great Britain, will be of immense service to a large range of readers, for probably no living antiquary is so well qualified to speak on this subject. Mr. Roach-Smith's sanction is all the more generous because he has been urged by his friends to reprint his various communications to the *Gentleman's Magazine*, and if I reprint them in these collections it may upset his plan. To the Rev. J. C. Atkinson I have a similar acknowledgment to make. To my request for permission, a ready and kindly assent was given, though he had before him a letter from Canon Greenwell which said, "With regard to the republication of your papers in the *Gentleman's Magazine*, I should very much urge you to do it; but I should somewhat enlarge and annotate the first account, and some figures should accompany the text. You should also add the record (edited) of Anderson's diggings, so as to make the account as full as possible. . . . Would it not be well also to add the record of the Robin Hood's Bay diggings, which would fitly fall into the same category as your own?" The names of Sir R. C. Hoare, Thomas Wright, Canon Greenwell, Dawson Turner, are too well known to archæologists for there to be any need of doing more than mentioning them here. Other names that appear are J. Platt, George Munford, Chr. Richardson, T. Faulkner, the author of the well-known histories of Kensington, Hammersmith, Fulham, etc.; W. H. Brewer, S. Woolmer, B. Poste, T. Adams, Gregory Doyle, Geo. Milner, junior, John Milner, Sir Samuel R. Meyrick, the well-known authority on ancient armour; J. Laskey, John Hogg, W. Mounsey, J. R. Walker, M.D.; Charles Collier, F.S.A.; J. T. Blight, John Hutchins, the Dorsetshire historian; Charles Warner, another Dorsetshire antiquary; Charles Moore Jessop, J. A. Repton, J. Tailby, Thos. Bere, W. C. Williamson, Thos. Jenkins, A. Crocker, James Logan, Gilbert Gilpin, J. Smart, William Owen, besides which we have our old friends T. Row for Dr. S. Pegge, once only in this volume; J. Briton, George Oliver, W. Hamper, and Stephen Vine.

I cannot conclude this introduction to the fifth volume of the series without expressing my thanks for the generous support I have received from many friends, and the many kind words of approval which strangers have frequently given me.

G. L. GOMME.

Castelnau, Barnes, S.W.,
February, 1886.





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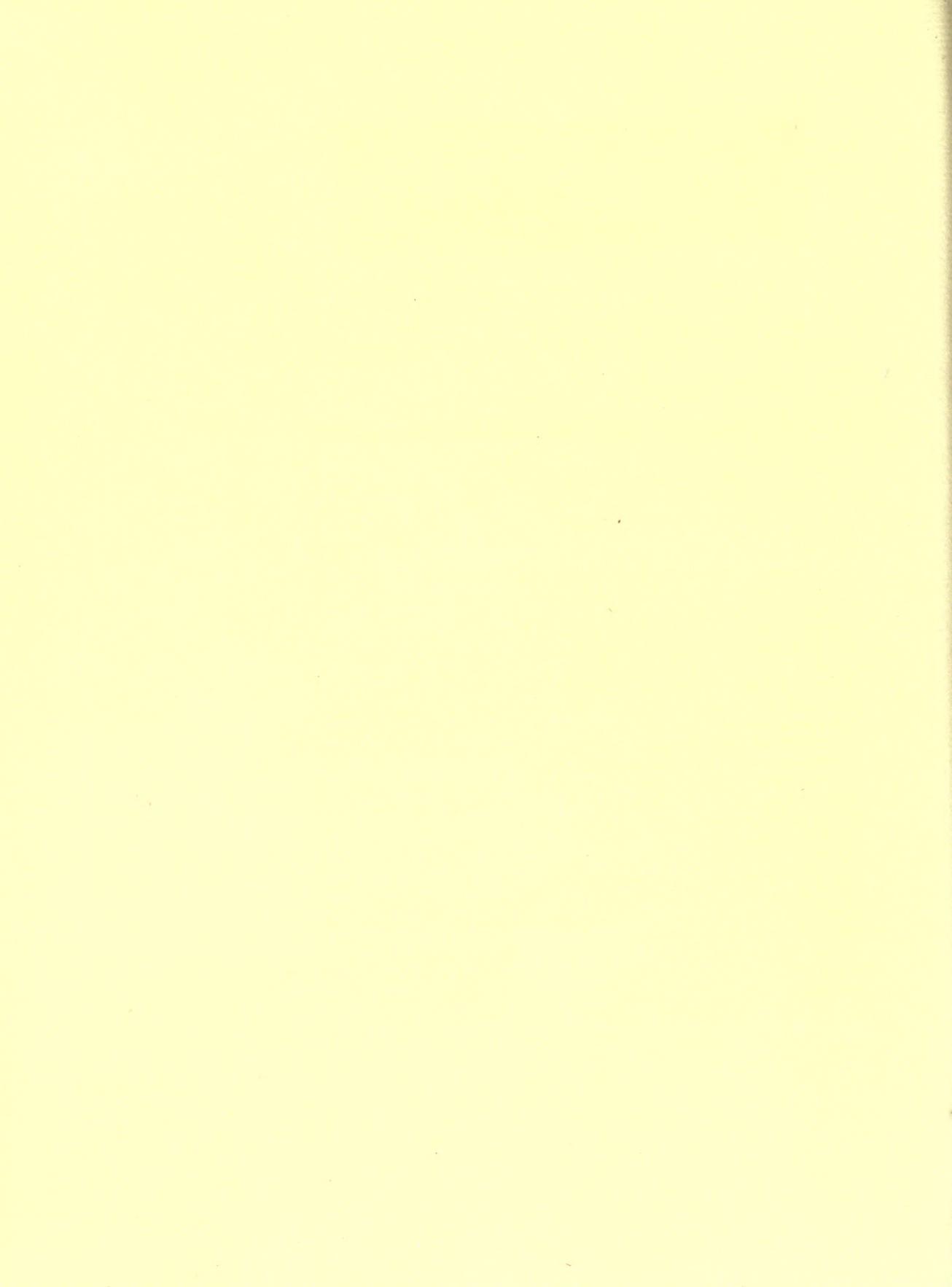
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Geologic and Prehistoric Remains.

VOL. V.

I





GEOLOGIC AND PREHISTORIC REMAINS.

Of some Diluvian Remains lately discovered near Oxford.

[1773, p. 277.]

THE collecting of extraneous fossils, or diluvian remains, having lately been much attended to by gentlemen who are curious in natural history, it may not be amiss, through the channel of your useful magazine, to inform them that, in digging for gravel to make the new temporary road on the back part of St. Clement's, Oxford, many broad-skirted gryphite oysters have been found with both valves, at the depth of about three feet; and with them were also found the molar teeth of an elephant.

About one hundred yards from this bed of gravel, and six or eight feet deeper in the earth, were found many more oysters, varying little in form and size from those in the bed of gravel, but of a very different colour, by lying in a stratum of blue clay. In this bed of clay were found several small fusiform belemnites, in company with many small ammonites, both of which, and also the oysters, appear to be saturated with pyritical juices, many lumps or portions of that poisonous mineral being scattered in the clay.

At Shotover quarry, about a mile distant from these beds of oysters, many and various marine exuviae are frequently discovered in an unctuous kind of clay, particularly a broad flat oyster, very different from those at St. Clement's, not one of that species being found in the clay at Shotover quarry. Many vertebrae of fishes, from four or five inches to less than one inch in diameter, have been found in the clay at Shotover, together with fragments of large bones of quadrupeds, such as the tibia and scapula of an animal not inferior in size to an elephant.

The scapula now lies before me, and is twenty-eight inches long, twenty-two inches round the head, eighteen inches round the neck, and about twelve inches broad at the base; it weighs about eighty pounds, and has attached to it one of the flat oysters peculiar to

that place, four inches in diameter; so that this bone must have lain there a considerable time from the dimensions of the oyster, whose under valve is closely attached to it. [See Note 1.]

J. PLATT.

Alluvial Remains at Reading.

[1833, Part II., p. 451.]

A well having been sunk in some ground in Spring Gardens, Reading, the workmen, on reaching a depth of about 30 feet, met with a stratum of shells embedded in a species of green sand, but varying much from that in which the oysters are found at Katesgrove. One piece, which has been deposited by a member of the Philosophical Institution in the Museum, is as interesting a specimen as any perhaps ever excavated. Some of the shells, which are of a variety of shapes, have the original polish, others impressed in chalk display the minutest markings; while some, half-open, exhibit the animal *crystallized* within.

Fossil Vegetation.

[1827, Part I., p. 160.]

An object which has excited considerable curiosity has lately been discovered in the vicinity of Westbury. As the workmen of Mr. Jesse Greenland, brickmaker, were digging for clay, they came, when about 5 feet below the surface, to a hard massive substance, which proved to be a piece of an oak-tree, in an upright position, closely embedded in the surrounding clay. The clay was carefully separated till they reached its base, which was 6 feet lower in the ground. The wood is perfectly black, and solid in the middle, measuring 6 feet in length, and upwards of 3 feet in circumference.

[1827, Part I., p. 638.]

A discovery, interesting alike to the naturalist and the geological student, was made a few days ago in the Moat Colliery, in the parish of Tipton, in Staffordshire. A petrifaction resembling part of the trunk of a considerable-sized tree towards the butt, measuring in length 2 feet 4 inches, and in circumference 4 feet 10 inches, with the bark formed into coal, was found in nearly an upright position, among the strata of iron-stone, at the depth of upwards of 200 yards below the surface, and which, in the extraction of it, was broken from the upper part of the trunk that still remains in the earth. On the exposure of this fossil to the atmospheric air, the coal formed from the bark shivered from the trunk. So great a curiosity is this specimen considered, that the proprietors of the colliery, at their quarterly meeting, passed a resolution, generously offering it as a present to the Trustees of the British Museum; and there can be no doubt that it will be deemed a valuable acquisition to the numerous fossils which are already deposited in that national institution.

[1827, *Part II.*, p. 449.]

An important geological discovery has recently been made, near Scarborough, in Grysthorp Bay, County York, of a large deposit of fossil plants, of the coal formation, presenting many varieties hitherto undescribed, and differing essentially from those of the Newcastle field. They occur in slate clay alternating with clay, iron-stone, and a thin seam of coal, about half-way below the high-water mark; and are principally stems and leafy impressions of tropical ferns. Several of the specimens of the frondescent ferns are of large and uncommon beauty.

[1840, *Part II.*, p. 197.]

A very perfect oak-tree, in a fossil state, has been recently discovered in a sand-pit, at Calcot, near the Bath road. Various branches have, during the last two months, been dug out close to the spot where the tree was found. It was only about four feet from the surface.

[1841, *Part II.*, p. 190.]

On excavating the earth for the foundation of a new wall at the Wilton Prison near Taunton, the remains of an oak were discovered sixteen feet below the surface. The appearance of the trunk and branches was that of their having been charred, being quite black, and almost in a fossilized state. Near these forest remains were a number of hedge-nuts, presenting a similar appearance.

Submarine Forests on the Norfolk Coast.

[1845, *Part I.*, p. 37.]

At page 410 of your 12th Vol., New Series [1839, part ii.] is the following paragraph:

"Dr. Young, of Whitby, with some of his friends, whilst examining a subterranean forest which was found during the excavation of a capacious bonding-pond at South Stockton, discovered one of the oaks to have been cut in two, which had evidently been done previous to its being covered by the earth. He supposes the forest may have been cut down by the Roman soldiers, as they were in the habit of laying timber on the low swampy grounds for the purpose of making roads. Be this as it may, it is certain the hand of man has been exerted on the timber, and it may form a fertile subject for the lover of ancient history and the geologist to speculate on."

The above passage brought to my mind the recollection of a fact that I now beg to communicate to you; and which, as it carries us back to a more remote period than that in which the Roman soldiers may be supposed to have been wood-cutters in our land, you may not think unworthy of insertion in your valuable Miscellany.

In ages very remote, the land along the coasts of Lincolnshire and

Norfolk extended much further out than it does at present; and whole forests once existed in places which are now entirely occupied by the ocean.

In the Philosophical Transactions for the year 1799 is a very interesting account of these submarine forests, by Joseph Correa de Serra. This paper relates only to the Lincolnshire coast; but roots, trunks, and branches of trees are found to extend along the northern shore of Norfolk also, as far as from the Wash to Thornham, and perhaps further.

At low-water these may be approached from the shore on foot; and about twelve years ago, accompanied by a friend, I walked to examine them. At about a mile from the high-water mark we arrived at the forest, where we found numberless large timber-trees, trunks, and branches, but so soft that they might easily be penetrated by the spade. They lie in a black mass of vegetable matter, which seems to be composed of the smaller branches, leaves, and plants of undergrowth, occupying altogether a space of five or six hundred acres.

But what I would particularly recommend to the notice of your antiquarian readers is, that in the prostrate trunk of one of these trees, embedded about an inch and a half by its cutting edge, I found a British flint celt, which is now deposited in the Norwich Museum.

Yours, etc., GEORGE MUNFORD.

Extinct Animals of Ireland.

[1834, Part II., pp. 147-150.]

Of the numerous wild animals with which Ireland formerly abounded, a few are now unknown, and the history of some of them so totally lost as to be neither recorded by the historian, nor preserved in the traditions which have reached our time. Several of those animals are supposed to have been extirpated by the fatal aim of the sportsman, or the Nimrod of the chase; others, from neglect, have become extinct, and have been supplanted by those less ferocious in their habits, or of a finer symmetry of form, or a more hardy and useful race.

Among the former are the Irish Elk, sometimes called the Moose Deer, whose bones and antlers are occasionally found in our bogs or in raising marl;—they far exceed in size those of any animal at present in this kingdom. The remains have been supposed by Sir Thomas Molyneux and others to be those of the *Cervus Alces*, or American Elk; but a perfect skeleton of the former now in the Dublin Museum proves that there is a decided and characteristic difference, and that our fossil Elk is a species of the genus *Alces* distinct from any now known. The large bones and enormous antlers prove also that they belonged to an animal superior in size to the American Elk.

From the bones discovered, its general height appears to have been about seven feet ; some of the horns are nearly fourteen feet from tip to tip ; and the height from the ground to the highest tip of the antlers, above ten feet. [Cf. Dawkin's *Early Man in Britain*, p. 104.]

The total disappearance of this stately animal has been attributed by some to an epidemic distemper, or pestilential murrain, which swept off at once the entire stock—as is said sometimes to rage among the Rein Deer.* In many places the remains of several animals have been found in the same field. This fact proves, at least, that they were gregarious, and countenances in some measure the opinion regarding their extinction ; and that “they died together in numbers, as they had lived together in herds.”

In Harris's edition of Ware's Antiquities of Ireland, mention is made of a Mr. Osburn, who found three heads and sets of horns at Dardistown, county of Meath ; five pair of these horns were also discovered not many years ago on the lands of Castle Farm, near Hospital, county of Limerick ; and seven pair were found near Knocktoe, in the same county.† About 1778, an entire skeleton of one of those animals was dug up from a marl-pit near Kileullen. The figure was standing upright, and the tips of the horns were only about two feet beneath the surface.‡

That at least some of those gigantic creatures were extirpated by the sportsman or hunter, is evident from the following circumstances. A rib of the animal seen in the Dublin Museum has been perforated by an arrow, or some sharp instrument ; and in cutting peat some years ago in a bog near Kells, county of Meath, there was discovered, a few feet below the surface, a row of strong oaken stakes, from six to eight inches in diameter, varying from ten to fifteen feet in length, and about six inches apart from each other. On clearing the bog away, it was found that these stakes formed an extensive enclosure, in which were numerous remains of the Irish Elk, and it is believed that those poles served as a kind of cage for entrapping the Elk, when driven into it by the hunter, after the same manner as elephants are still taken in Ceylon and Indostan.§

From the shortness of the neck of those animals, it has been supposed that they could not graze on the fields, but browsed on the leaves and tender branches of trees ; but from the great size of their horns it is evident they must have been immediately entangled if they entered a forest. Hence it is probable that they existed only in a champaign country.

In a work entitled “ De Regno Hiberniæ,” etc., written about the beginning of the seventeenth century, by Dr. Peter Lombard, titular

* Harris's Ware, p. 168.

† Fitzgerald and M'Gregor's History of Limerick, p. 403.

‡ Brewer's Beauties of Ireland, vol. ii., p. 53.

See Account of Ceylon.

primate of Armagh, he notices wild boars as then in Ireland. He also mentions several kinds of hounds now extinct, then kept for the chase, amongst which were those for hunting otters, deer, wolves, and the boar. As this is the only information we have found of wild boars being in Ireland at so late a date, perhaps they were extirpated about that period.

In the same work Dr. Lombard states that wolves were so numerous, that the cattle had to be secured at night from their ravages. Fynes Moryson, in his "Itinerary," likewise mentions the depredations committed on cattle in Ireland by the wolves, the destruction of which he says is neglected by the inhabitants; and adds, that these animals were "so much grown in numbers as sometimes in winter nights they will enter into villages and the suburbs of cities." This statement of their numbers and boldness is also corroborated by accounts of a later date, particularly by Blenerhassett, in his "Directions for the Plantation of Ulster," printed in 1610. In 1662, we find Sir John Ponsonby, in the Irish House of Commons, reporting from the Committee of Grievances, the "great increase of wolves," and that the same was a grievance, and requesting that the House would be pleased to take the same "into their consideration," and to make a law for the taking and killing of them for the future. These notices of their numbers and boldness are still further confirmed by later accounts. In a dialogue entitled "Some Things of Importance to Ireland," published in Dublin in 1751, the author states that an old man, near Lurgan, informed him, that when he was a boy, wolves, during winter, used to come within two miles of that town, and destroy cattle. This must have been about the beginning of the last century.

According to several accounts, the last wolf observed in Ireland was killed in the county of Kerry, in 1710; tradition says on the Crany river, Carnlough, near Glenarm; and another account adds that the last wolf seen in Ulster was shot by Arthur Upton, on Aughnahreack, or the Wolf-hill, near Belfast.*

To effect the extirpation of the wolves the inhabitants were obliged to keep a breed of large dogs, the *Canis Graius Hibernicus*, or Irish greyhound, commonly called the Irish Wolf Dog. These animals are believed to be descended from the great Danish dog, brought hither by some of the Northern tribes that settled in this kingdom. On the extermination of the wolves these large animals, being no longer useful, were suffered to become extinct through neglect. The last we have seen mentioned were kept by the late Lord Sligo, near Westport, about the year 1800, but they are since dead. Goldsmith

* The last wolf seen in Scotland was shot by Sir Ewen Cameron, of Lochiel, in 1680. [See Harling's *British Animals Extinct within Historic Times*, 1880, *passim.*]

mentions that he had seen a dozen of these dogs, and that the largest was about four feet high.

In the 10th century the Irish greyhound or wolf dog was held in such estimation by the Welsh, that in the laws of Hoel Dha, he seems to have belonged only to the king and nobility, and the fines for injuring him were very great.* They were also formerly sent as presents to foreign princes. In the reign of Henry VIII. four were annually exported to a Spanish nobleman ; and in 1615, we find some of them sent to the Great Mogul. In 1623, Viscount Falkland, Lord Deputy, writes to the Earl of Cork to send him two Irish wolf dogs, of a white colour.† There is a good figure of this dog in Bewick's "Quadrupeds," and there is also a figure in the "Field Book."

Ireland also formerly possessed a remarkable breed of wild cattle. These were all white except their ears, which were of a reddish brown. In 1203, we find the wife of William de Braosa sending from hence to an English Queen the singular present of four hundred of these cows and one bull.‡ This gift would probably not have been forwarded to her Majesty, if similar animals had existed in that country. Hence it is likely that from this herd are descended the stock of wild cattle still seen in several noblemen's parks in England. A few of the like cattle were also preserved in Hamilton Park, in the vicinity of Glasgow, so late as 1760 ; but neither record nor tradition has pointed out when they became extinct in the country from which it is probable they were originally derived.

In the summer of 1830, as some labourers were working in the bottom of a limestone quarry, near the parish church of Carnmoney, about four miles from Belfast, they discovered in a black clay the bones of an animal which hitherto have been only found in a fossil state, and it is believed never before in this kingdom. The bones were ascertained to belong to the *Plesiosaurus*, an animal of the lizard species, which bears the least resemblance to those of the present world of any now known. These remains consisted of eighteen vertebræ, or joints of the backbone ; but the greater number were destroyed, or carried off, so that only seven joints have been preserved, which have been deposited in the museum of the Belfast Academy. The most remarkable feature in the structure of those animals is the extreme length of their neck, which is composed of many more vertebræ than are found in the longest-necked bird, even the swan, which surpasses in this respect any other animal. When living it must have presented a true serpent neck, with a remarkably small head. The length of the largest species found seems to have been nearly twenty feet. See "Annals of Philosophy," May, 1831.

S. M. S.

* Anthologia Hibernica.

† Gentleman's Magazine.

‡ Cox's History of Ireland From this very unequal number, the cows sent were probably only forty.

Fossil Animal Remains.

[1762, p. 155.]

The Parliament having given orders for a powder-magazine to be erected at Folkestone, in Kent, the following petrification was dug out of an old burial-ground long since disused, being taken out of a grave, and presented to Roger North, Esq., of Rougham, in Norfolk.

It is thought, by the virtuosi, to be a frustum, or piece of the muscular part of a human body, weighing about ten pounds, on one side of which are plainly to be seen two bones lying half out of the mass, one of which is about five inches long, and seems to be the tibia, with its head, and part of the shank, or shin-bone ; the other is shorter, and much less. On the opposite side appears a flat piece of wood (seemingly oak), strongly petrified, which it is thought denotes part of the coffin it was interred in. The whole mass of flesh, as to colour, looks, as near as can be compared, like a piece of mummy, or embalmed flesh, interspersed with a great many iron-coloured spots, and in its shape resembles a great piece of flesh rolled up in four or five folds, and has some appearance of the marcasite, or iron-stone. This is esteemed the greater curiosity, inasmuch as flesh of any sort seldom or ever is known to have undergone so strong a petrification, and seems to preponderate even iron itself. The original cause of this so strongly petrified substance is not known ; but it is imagined some vitriolic juices, strongly impregnated with ferruginous particles, by falling upon that part of the body (for there was no other piece of the like kind to be found), might probably be the occasion of that wonderful and uncommon alteration.

[1765, p. 450.]

Some days ago, near South Tyne-side, about three miles above this place, were found some surprisingly large teeth, but of what animal nobody who has seen them can pretend to say. No part of the skeleton has been found except some of the skull and jawbones, both of which are so broken that it is impossible to form any judgment of them. The teeth that are largest are broken off just at their insertion into the jaw ; their shape and dimensions are as follow, *viz.*, the largest in length $3\frac{1}{4}$ inches, and $4\frac{1}{2}$ inches round, grooved with deep furrows from the apex to the base ; another in length $2\frac{1}{4}$ inches, and round $4\frac{3}{4}$ inches ; a third $2\frac{7}{8}$ inches in length, and $4\frac{1}{4}$ inches round. They are all axle-teeth of the same texture, and were joined close to one another, inserted into one side of the jaw. Allowing these to be all the axle-teeth on one side of the mouth, and to take up $4\frac{1}{2}$ inches in extent, the fore-teeth and grinders on the other side, must consequently take up twice as much room ; which makes the capacity of the mouth at least $13\frac{1}{2}$ inches. The remains of the teeth are very

fresh ; and a more perfect guess of what sort of animal it has been may probably be made, as there are some persons intending to search for the skeleton. It has, without doubt, been of the granivorous kind, as the hard plates of bone in the teeth are disposed at certain distances, in a perpendicular direction, from the top to the bottom of the teeth.

I am, Sir, yours, etc., CHR. RICHARDSON.

[1783, *Part I.*, p. 321.]

I am induced to send you a sketch (see plate II., fig. 2, 3) of two stones brought me by a Somersetshire quarrier a few days since. They weigh about twenty-five pounds each, are of extreme hardness, and richly charged with animal bones, but of what animal I am not anatomist enough to determine. I think the bones are not perfectly petrified ; but they are much harder than in their bony state, and they are so intimately united with the stone that there is no possibility of separating them. They were taken up at a considerable depth from the surface, and have, I think, the appearance of the ribs of lambs ; but that they are animal bones, is as certain as that the rock which holds them was once in a soft state to receive them. No. 1 is a beautiful marine shell. I intend sawing them down the middle ; and if they disclose anything still more curious, I will communicate it to you.

P.S.—Upon a closer examination I think I may pronounce the bones to be a perfect petrifaction ; but to the eye they seem so perfect a bone, that they deceived me. They are of a fine polish, and of a dark brown colour.

P. T.

[1792, *Part II.*, p. 1200.]

In digging for ochre some years ago in the pits not far from this city [the name of the city is omitted], my man informed me they had found bones of a very uncommon size. Curiosity urged me to inquire farther into the fact. The man told me, when I came there, that in digging he had discovered the ground to fall. He apprehended it was a pit-fall, told his master of it, who told him very carefully to dig about that place, which he did, and found a cave of a very great size, and bones of the size of an elephant, excessively large. I was exceedingly surprised when I saw them, never having seen any near the size.

J. N.

[1799, *Part I.*, p. 12.]

A chalk-pit in which lime is burnt, about a hundred yards' distance from the turnpike-road leading from Newmarket to Bury, and on the north side of it, and about the same distance from Carmerow bridge, affords many fossil remains of marine animals, mostly, as may be expected, what are commonly found elsewhere, such as fishes' teeth, globular echini without spines in abundance, many shells of the size

of a large sea-ear, but not that shell. The only remarkable one for its singularity is that here figured (plate I., *a, b*), and another similar in shape and size, besides four pieces of stem about an inch long each. Both the more perfect ones were broken, the figured one in three pieces, the other in two. If the other bits belong to either of the animals, they must have formed some other part, as they do not readily join. Some resemblance between them and the *Asteropodium* figured in Hill's fossils and *Cyclopædia* fossils may be observed; but in all not the least appearance of wires, branches, or *appendicula*, is discernible, the backs being perfectly smooth, without the least appearance of joint, or power of flexibility.

[1803, *Part II.*, p. 1075.]

Lately, by the falling down of a piece of the cliff on Walton shore, near Harwich, the skeleton of an enormous animal was discovered, measuring nearly 30 feet in length. Some of the bones were nearly as large as a man's body, and 6 or 7 feet long; the cavities which contained the marrow were large enough to admit the introduction of a man's arm; the bones, on being handled, broke to pieces. One of the molar teeth was carried to Colchester by Mr. J. Jackson, who took it from the spot, in whose possession it now is; it weighs 7 pounds, is of a square form, and the grinding surface is studded with several zigzag rows of laminæ, which seem to denote that it belonged to a carnivorous animal. There were more teeth, which were unfortunately broken, one of which weighed 12 pounds. It is probable that the tusks will be found by searching further into the cliff, or amongst the earth which has fallen down.

[1824, *Part II.*, p. 548.]

The violence of the weather lately washed down a considerable portion of Burton Cliff, near Bridport, and exposed a mass, which, on digging out, proved to be the vertebræ of some animal, whose size must have been enormous. It is in excellent preservation, every process and part being perfect. It was deeply embedded in oolite strata, and must have lain from the diluvian or ante-diluvian period, as the whole of the diluvian remains found in the range of cliffs from Bridport to Devonshire are situate inferiorly to the different strata, and which are chiefly blue lias, green-sand, white lias, red marl, sand-stone, and chalk. Mr. John Tucker, of Bridport, is in possession of this interesting natural object, and having procured it for a short time, he will give a personal inspection of it, and will assist in researches for the discovery of other portions.

[1744, p. 563.]

A farmer near Thorpe, in the Ainsty, digging in a low ground for water, discovered the horns of a stag's head, upon which he got some of his neighbours to assist him, and with great difficulty they got it

out of the earth, for it is supposed to be four times greater than any of that kind to be seen now.

[1827, *Part I.*, p. 160.]

The head, horns, vertebrae of the neck, and some rib bones, of a large animal of the deer kind, which may now be regarded as an extinct species, were discovered in the cliff at Skipsea, and have subsequently been exhibited in Bridlington, by James Boswell, the person who found them. They were partly embedded in saponaceous clay, overlaid with vegetable matter, about 5 feet in thickness, and in different stages of decomposition (about $2\frac{1}{2}$ feet being a sort of moor soil, and the remaining $2\frac{1}{2}$ feet being composed of half-decayed leaves, twigs, etc.) above this, to the surface, about 1 foot of common earth. The head, with the upper jaw, containing a row of fine teeth on each side, is entire; the under jaw wanting. The horns, which are broken toward the tip, are large and branching, their dimensions being nearly as follows:

	feet. in.
From the extreme tip of each horn 8 0
From the tip of one horn to its root 5 9
From the tip of one of the inner branches to the tip of the opposite branch 3 0
The breadth of one of the palms within the branches	... 1 7
The length of the head from the back of the skull to the extremity of the upper jaw 1 10
The breadth of the skull 0 10

The brow-antlers, as well as the main horns, are palmated, and slightly divided at the ends, and the whole may justly be considered as a rare and interesting specimen of organic remains.

[1828, *Part I.*, p. 462.]

Some workmen employed at Kingsholm, near Gloucester, in opening a pit of gravel, recently discovered, at about 5 feet below the surface of the earth, the tooth of an elephant, partly fossilized, but still retaining a considerable portion of the enamel. It measures 19 inches in circumference, weighs 5 pounds, and is in a perfect state of preservation. This curious relic of an antediluvian world is in the possession of Benjamin Bonner, Esq., of Gloucester. About thirty years ago a fossil crocodile was discovered in an adjoining gravel-pit, which was in the possession of Mr. Hawker, of Woodchester.

[1822, *Part I.*, p. 545.]

A discovery of fossil remains, similar to those usually found in alluvial soils, was recently made at Atwick, near Hornsea. The portion of a tusk has been presented to Dr. Alderson of that place, and is now in the shop of Mr. Rodford; it is about 38 inches in length, 20 inches in circumference at the lower end, and weighs

4 stone 2 pounds. It is of fine ivory, except where slightly decomposed at the fractures, by lying in the earth, and has probably been thrice as long when entire. Conjecture has assigned this fine remnant of former days to the mammoth—but erroneously. It is, beyond doubt, the tusk of the fossil elephant, an animal described by Cuvier as of a distinct race from the Indian or African elephant, but most resembling the former; and which might probably, therefore, be capable of living in a more temperate climate. The tusk of the mammoth, as appears by the skeleton of one put together by M. Cuvier, is of a much greater curvature than the present, similar ones to which have been discovered in various parts of England, particularly on the east coast, and one recently near Bridlington. It was found on the sea-shore, having no doubt fallen from the cliff, where other portions may exist, although such remains are not unfrequently discovered unaccompanied by other bones. We have been desired, as above, to correct an erroneous statement which has appeared, that it was found on the sea near Ackwith.

[1827, *Part I.*, p. 555.]

An extraordinary and very curious fossil reptile, a singular remain of the antediluvian world, was lately found by Mr. Shirley Woolmer of Exeter, who now has it in his possession. The antique animal is 3 inches in length, from the mouth to the tip of the tail, and $3\frac{1}{2}$ inches round the body, which appears like three distinct parallel bodies united in one. It has two legs, two short or stubbed horns, and a round head, exhibiting four prominent eyes, and is in an incurvated position, with its tail under it, which reaches only half an inch from its mouth. It is in a high state of preservation.

[1825, *Part I.*, p. 360.]

Various fossil remains, among which are some bones of a gigantic crocodile, and certain traces of the megalosaurus and pleiosaurus, have been found in the sandstone of Tilgate Forest, Sussex, and also those of an enormous animal, thought to be the iguanodon. The teeth are evidently those of an herbivorous animal of extraordinary size, not less, according to the proportions of the remains, than 60 feet in length; and it is considered to have been an amphibious species of animal.

[1825, *Part I.*, p. 637.]

The bones and teeth of a gigantic species of crocodile, together with bones of various species of animals of the order of Saurians, or lizards, have recently been discovered near Cuckfield, in Sussex, in the stratum called green-sand, which lies under the chalk in that county. One of these animals appears, from its bones, to have been of a most enormous size, not less than 60 feet in length, its bulk and height were equal to those of the elephant. It belongs to a species,

hitherto undescribed. The form of the teeth indicates that it lived upon vegetables; the celebrated anatomist, Baron Cuvier, who has seen specimens of these teeth, is decidedly of this opinion. In this respect it resembles the American lizard, called the Iguana, which is herbivorous, and lives principally in trees. It also nearly resembles the Iguana in the structure of its bones, and from this resemblance it has been proposed to call the fossil animal found near Cuckfield the Iguanodon. The bones are in possession of Mr. Mantell, surgeon, Lewes. From the remains of birds and vegetables found with the Iguanodon, it appears to have been a land animal, or to have lived in marshes. An animal of nearly equal size, and also allied in form to the crocodile, was found some years since at Lyme; its monstrous head is now in the possession of Mr. Johnson, of Clifton, near Bristol; but this animal had paddles like the turtle, and is supposed to have been an inhabitant of the ocean. The lias stratum, in which the remains of many new species of animals allied to the crocodile are most frequently found, runs along the whole southern side of Oxfordshire, from Lutterworth to Shipston.

[1827, *Part I.*, p. 555.]

A short time since, some workmen, employed in digging stone at Boughton Hall, the seat of — Braddock, Esq., near Maidstone, discovered bones and teeth of several animals, some of which the proprietor of the estate transmitted to the Geological Society. Dr. Buckland, Mr. Lyell, and other scientific gentlemen, in consequence, visited Boughton, when it was discovered that the bones had been found in a fissure in the rock, which had evidently been filled up by diluvial action. The bones of at least two hyænas (of the extinct Kirkdale species) were found, together with bones and teeth of the horse, rat, etc.; but the fissure extended so deeply in the solid rock, that it could not be traced to the bottom, and it will not be possible to ascertain whether it leads to a cave formerly inhabited by hyenas, or is merely a fissure filled up by the effects of the deluge, until the quarry is considerably enlarged.

[1827, *Part II.*, p. 69.]

The quarries where the remains [at Boughton] were found appear to have been worked for many centuries, and there is a tradition that many of the materials of Westminster Abbey, and other ancient buildings in London, were brought from thence. The stone is called Kentish Rag; it consists of a succession of beds of limestone and coarse flint, dispersed in irregular series through a matrix of sand and sand-stone; its geological position is in the lowest region of the green-sand formation, immediately above the weald clay. The remains in question consist of the jaws, teeth, and broken portions of the skull, together with bones of the fore and hind legs of a very large hyæna,

and a few other teeth and bones, apparently of the ox and horse. All these were found nearly together, within the space of a few feet, in one of the numerous cracks and fissures (locally called vents) that intersect the strata at this place, and are usually from one to twenty feet broad ; on the sides of many of these vents are hollow apertures of various sizes, some of which occasionally expand themselves into caves ; two such caves have lately been discovered in the quarries on the north side of the valley at Boughton Mount. These fissures, or vents, are cut through the strata from the bottom of the quarries to the surface, and are filled with diluvial loam interspersed with fragments of the adjacent rocks and numerous chalk flints ; these last must have been drifted hither from some distant hills, and have fallen into the fissures at the same time with the loam. This loam, at its upper extremity, becomes united to that which covers the surface of the quarry and the adjacent fields. The bones were discovered at about 15 feet deep, in one of these fissures ; and from the manner in which they were scattered amongst the loam and stony fragments, they appear to have been drifted to their present place at the same time with the diluvial matter amongst which they lay, occupying a position precisely similar to the bones of hyænas and other animals that were discovered in the fissures of the breakwater limestone rock near Plymouth, embedded in similar diluvial loam and pebbles. It is highly probable that at Boughton, as was the case at Plymouth, the caves communicating with these fissures will be found to contain an abundance of similar bones.

[1809, Part II., p. 672.]

A petrified land tortoise, in the highest state of preservation, was lately discovered by some labourers, who were digging in Swanage rocks, on the island of Purbeck, at the depth of 70 feet. A clergyman offered five guineas for it, which was refused ; but after exhibiting it about, the labourers sold it to a gentleman of Upway for eight guineas ; since which £300 has been offered for it. The mate was subsequently dug up ; but it was broken to pieces, and spoiled.

[1823, Part I., p. 173.]

The skeleton of a rhinoceros was discovered a short time ago by some miners in search of lead ore, 90 feet below the surface of the earth, in the neighbourhood of Wirksworth, Derbyshire, in what is called diluvian soil. The bones are in a perfect state, and the enamel of the teeth uninjured.

[1824, Part I., p. 454.]

The entire skeleton of a large mammoth, *i.e.* a fossil elephant of the same species with those which occur in Siberia, and all over Europe, has been very recently discovered at Ilford, in the county of Essex, near Stratford and Bow. It lay buried at the depth of about 16

feet, in a large quarry of diluvian loam and clay which is excavating for making bricks. Mr. John Gibson, of Stratford, has been diligently exerting himself in collecting and preserving as much as possible of this skeleton ; and a few days since he invited Professor Buckland and Mr. Cliff to assist him in disinterring the remainder of the bones, which he had purposely left in their natural position in the quarry. These gentlemen found a large tusk and several of the largest cylindrical bones of the legs, also many ribs and vertebrae, with the smallest bones of the feet and tail lying close upon one another, so that there can be no doubt, that with those before collected by Mr. Gibson, they had made up an entire skeleton, at least 15 feet high ; they were imbedded in tenacious clay (which is dug for bricks), being part of the great superficial covering of diluvian clay, sand, and gravel, which is spread over a large portion of the counties of Essex, Suffolk, and Norfolk, and along the whole east coast of England, at irregular intervals, and is almost everywhere occasionally discovered to contain remains of antediluvian animals similar to those at Ilford, viz., the tusks, teeth, horns, and bones of the elephant, rhinoceros, horse, and stag, etc. Many other tusks and bones have, within these few years, been discovered and preserved by Mr. Thompson, the proprietor of Ilford Clay Pits, some of which he has presented to the Royal College of Surgeons, whilst others are still in his own possession. Two enormous tusks, also, and a large thigh-bone of an elephant, from the same place, have been presented by J. W. Russell, Esq., to the Geological Society. These bones at Ilford, when first uncovered, are usually entire and perfect in their form, but are so extremely tender whilst wet, that it is almost impossible to extract them unbroken. On being dried, however, they acquire a considerable degree of firmness. It is much to be regretted that, although Mr. Gibson has preserved fragments of almost every limb of the elephant in question, they are so much broken that it is impossible for the skeleton to be restored and mounted, as has been done in the case of the elephant of the same species, which was found, with even his flesh and hair perfectly preserved, in a cliff of ice on the shore of Fungusia, and which is now standing, with the dried flesh still adhering to the head, in the Imperial Museum at St. Petersburg.

[1848, *Part II.*, p. 636.]

In removing the earth on the north side of the Norman Tower at Bury St. Edmund's, just within the line of the abbey wall, and about 9 feet from the tower, opposite to the entrance to the chamber now used as the ringing loft, the workmen have come upon a number of skulls and other bones of animals, lying about 2 feet below the present surface, and rather more above the original base-line of the tower. Altogether about twenty skulls, more or less perfect, were taken out,

and bones of the trunk and limbs in proportion. They were evidently animals of various ages, some of the tusks and teeth being blunted with use, whilst others had all the sharpness of full vigour, and others had not arrived at maturity. Doubts being entertained whether they were the bones of dogs or of wolves, the osteology of which is so nearly identical, the most perfect specimens were sent up to Professor Owen, of the Royal College of Surgeons, as the highest authority in comparative anatomy, for his opinion, and he determined that they are all of the wolf, with the exception of one skull, which is that of a large dog. There was not a trace of human remains.

The wolf is believed to have been extirpated from this country between five and six hundred years ago, the last record of its existence in any numbers being in the reign of Edward I., when a decree was issued for its destruction, erroneously stated by Hume to have been completed by King Edgar's tribute of wolves' heads exacted from the Welsh in the tenth century. It becomes, therefore, a matter of curious speculation, in what manner the remains of so many of these animals should have been deposited in the situation described—more especially when the fact of their being above the original surface is considered. Why should the bodies of so many wolves have been brought into such a place? Was it in any way connected with the legend of the wolf having guarded the head of St. Edmund in Eglesdene (Hoxne) wood? Was there any custom of keeping or showing off wolves in honour of that apocryphal history? Or were any of the lands of the monastery—amongst which was the manor of Woolpit (*Wulfpeta*), held by tenure of delivering a wolf's carcase to the Abbot, like King Edgar's tribute from the Welsh? [See note 2.]

[1841, Part II., p. 81.]

Several very remarkable fossil remains have recently been discovered: 1. The far tooth of a mammoth, or mastodon, in very excellent preservation, among some gravel in the bed of the Trent, a few miles from Nottingham. It weighs $9\frac{1}{4}$ pounds, and is one of the most perfect specimens ever seen in England. The antediluvian monster is judged to have been 20 feet high.

2. At Cambridge, in forming the sewer in Northampton Street, the old "Bell Lane," at the Castle end, a splendid specimen of the tusk of the mammoth, lying about $10\frac{1}{2}$ feet from the surface in sand and gravel, in a horizontal position, upon the surface of the gault. Its extreme length was 6 feet 7 inches, and the circumference of its largest end $2\frac{1}{2}$ inches; being in a soil saturated with moisture, it was in a very tender friable state, and a portion of the fossil ivory exfoliated when exposed to the air, showing its beautiful concentric rings. It was removed, under the superintendence of Mr. Deck, and has been added to the museum of the University. Within two yards of the same spot, and 10 feet below the surface, a rib and some vertebral

bones were found, which from their size no doubt belonged to the same animal; but the most extraordinary and curious relic was a human lower jaw, with the teeth perfect, deposited in diluvial detritus. Mr. Deck possesses this remarkable relic of primeval creation.

3. A very fine specimen of the *Plesiosaurus Dolochodcirus* in the cliffs in the neighbourhood of Whitby. It measured in length 15 feet; the neck is 6 feet 6 inches long, exclusive of the head, and 8 feet 5 inches across the fore paddle. The specimen is entire, without, it is believed, a single joint wanting, and has been cleverly excavated from the strata in which it was found.

4. At Leeds, in cutting a drain on the Kirkstall Road, a beautiful horn of the elk kind, $6\frac{1}{2}$ feet below the surface of the ground. It was laid upon the gravel bed, covered by a bed of solid clay, $4\frac{1}{2}$ feet deep, and a surface of earth of 2 feet deep; is in a state of fine preservation, and although it is evident that a considerable part of the root end of it is wanting, it still measures about 3 feet in length, and contains eight stems or branches. It has been sent to the Leeds Philosophical and Literary Society.

5. At a soirée of the Marquess of Northampton, Dr. Mantell exhibited one of the most beautiful and interesting relics of a "former world" hitherto discovered. It was the perfect shell or a carapace of a marine turtle, about 7 inches in length and 4 in breadth, imbedded in a block of pure white chalk; and from the dark chocolate colour of the fossil, the contrast with the matrix was very striking, and displayed the characters of this extraordinary organic remain to great advantage. The specimen was discovered by Mr. Benstead, of Maidstone, in the chalk near that town. Such is the state of this fossil, and so admirably has it been dissected from the stone, that the upper part of the shell admits of removal, and the bones of the sternum and abdomen are thereby exposed.

[1839, Part I., p. 300, 301.]

In the month of August, 1838, workmen began to excavate the grounds within the precincts of the western court of the Royal Hospital, Chelsea, formerly called Thames Shot, for the purpose of building a common sewer. This ground was the site of King James's College. Upon digging down about 15 feet, the foundation was discovered, consisting of brick walls of irregular form, in some places 18 and 20 feet thick, of solid and compact masses, nearly impenetrable to the pick-axe. Hereabouts were discovered two human skeletons, and a great quantity of human bones; thus indicating the site of the burial-ground of the old College, which at one time had been used as a place of confinement for prisoners during the Dutch war in 1676. As the workmen proceeded in

excavating the line of sewer from south to north, at the depth of about 22 feet, great quantities of bones of various animals were discovered embedded in the alluvial soil, consisting principally of extinct species of the genus *Bos*, among which were thigh and other bones of enormous size, jaw-bones with teeth in good preservation, ribs, scapulae, and several crania, and also some large elks' horns. The whole were more or less advancing into a state of putrefaction, but, after a few days' exposure to the air, the exterior coating fell off, and they became white and clear. A selection of them has been forwarded to the British Museum, where, of course, they will be open to public inspection. A quantity of bones of smaller animals, supposed to be those of the hyena, the wolf, and the wild boar, with several tusks of the latter, were also found. And on the site of King James's College was dug up a coin of Tetricus, and a brass ring about half an inch in diameter. In proceeding northward with the excavation, and outside the limits of the Royal Hospital, these relics became of less frequent occurrence, and of much darker hue, consisting of jaw-bones and skulls, with the teeth in fine preservation; and nearly at the extremity of the digging was turned up at about 12 feet deep, firmly fixed in the alluvial silex, a large iron horse-shoe, of rough and clumsy shape, and much worn at the front, together with an iron bar, very thin, much corroded, and about 3 feet in length.

T. FAULKNER.

[1843, *Part II.*, p. 303.]

As some workmen were employed in digging a new sewer in Chelsea, at about 18 feet deep, they discovered a great variety of bones, forming the skeletons of various animals, some of which are of enormous magnitude, consisting of the mastodon, the elephant, the ox, the elk, the hyena, and the wolf, etc., likewise the skulls of different animals, all of which are in good preservation. Many of the specimens of the above have been selected, and are now in the possession of the Rev. Mr. Kingsley, the rector of the parish.

[1839, *Part II.*, p. 557.]

There have been recently discovered in the parish of Motteston, on the South side of the Isle of Wight, the bones of that stupendous animal supposed to be the Mammoth, or Mastodon. Several of the vertebrae, or joints of the back-bone, measure 36 inches in circumference: they correspond exactly in form, colour, and texture, with the bones found on the banks of the Ohio in North America, in a vale called by the Indians Big-bone Swamp. Also, in the parish of Northwood, on the north side of the island, the bones of the crocodile have recently been found by the Rev. Mr. Hughes of Newport. They seem to have belonged to an animal of that species, whose body did not exceed 12 feet in length. Their calcareous nature is

not altered ; but the bones of the mastodon (found on the south side of the island) contain iron.

[1856, Part II., p. 361.]

The hock-bone of an immense animal was recently discovered in the bed of the river Ancholme, near Brigg, Lincolnshire. The hock is 64 inches in circumference, and the bottom part of the bone (which has been cut) is 48 inches in circumference. It appears to be the hock-bone of the megatherium. It is now in the possession of Mr. R. E. Leary, printer, Lincoln.

Fossil Fish.

[1859, Part I., p. 466.]

According to the *Sussex Express*, some extraordinary specimens of fossil fish have been dug up by a party sinking a well at Mr. Best's brewery, that seem to substantiate Dr. Mantell's theory of this portion of the Weald having been in remote ages the site of an estuary, or the bed of an immense river, previous to the crust of the earth being so perfected as to become the abode of mammalia, and very possibly thousands on thousands of years before it was inhabited by man. The well-diggers under the super soil found a sand rock, extending in depth nearly ten feet, beneath which they came upon a chalky débris in the shape of marl, intersected occasionally by layers of a harder substance. At the depth of forty feet from the surface they suddenly came on a smooth sand rock, evidently once the bed of a river, for it was here they came upon the fossils, and it is somewhat extraordinary that they should hit upon the specimens found in the small circumference of a well. One of them is a petrified eel, evidently of the conger species, perfect from the lips to the tip of the tail, measuring a trifle over 4 feet in length, and lying on its belly, with the body slightly undulated, exactly as we see the muscular movements of a dying eel assume when we have severed the upper part of the spine. The other is a perfect petrifaction of a fish that the writer of this article is not naturalist enough to define, but it seems to be of the salmon species, which the tail and the dorsal fin specify, but the lower part of the body is not so tapering as the salmon, the salmon trout, or the common trout, of the present day. It more resembles an occasional visitor in our brooks known as the "bull trout," that is shorter and thicker in the body, but in other respects very much resembles the salmon trout. The length of this fossil is about 2 feet 6 inches, a size the genera does not grow to in these times, and the depth of the body at the dorsal fin, 9 inches. The specimens are really worthy the attention of the geologist and naturalist. We must observe that the fossils are covered with bivalves and other shells, evidently the accumulation of years after the

fish, by getting into waters charged with petrifying qualities, met with death.

Cave Remains. [See Note 3.]

[1785, p. 850.]

I enclose you an exact representation of the caverns near Nottingham, with the conjectures of a learned antiquary concerning the origin of these remarkable remains of antiquity. (*See Plate I., fig. 3.*)

R. D.

These cavernous structures are situated three parts of a mile south-west of Nottingham, in the park the property of the Duke of Newcastle. They consist chiefly of a number of houses, a dove-house, and a church, in which is an altar, etc.; there are two pillars, and there was formerly painting upon the walls. The river Leen, or Lin, gently glides through a part of them, and continues its course towards Nottingham. Various have been the opinions of antiquaries concerning these excavations; some imagine them to have been British colonies: others think them of much later date.

"One may easily guess," says Dr. Stukeley, "Nottingham to have been an ancient town of the Britons: as soon as they had proper tools, they fell to work upon the rocks, which everywhere offer themselves so commodiously to make houses in, and I doubt not, here was a considerable collection of colonies of this sort; that which I have described in Plate XXXIX. (*Itinerarium Curiosum*), will give us an idea of them. It is in the Duke of Newcastle's park. What is visible at present is not of so old a date as their time, yet I see no doubt but it is formed upon theirs. This is a ledge of perpendicular rock, hewn into a church, houses, chambers, dove-houses, etc. The church is like those in the rocks of Bethlehem, and other places in the Holy Land; the altar is a natural rock, and there has been painting upon the wall; a steeple, I suppose, where a bell hung, and regular pillars; the river, winding about, makes a fortification to it, for it comes at both ends of the cliff, leaving a plain in the middle. The way into it was by a gate cut out of the rock, and with an oblique entrance for more safety; without is a plain, with three niches, which I fancy was their place of judicature, or the like. There is regularity in it, and it seems to resemble that square called the Temple, in the Pictish castle (Plate XXXVIII.), in Scotland."

[1805, Part I., p. 409.]

The instrument (*fig. 7.*) was found in a natural cavern, 28 feet below the surface, on a ledge in the rock at Burrington Coomb, in Somersetshire, about five miles from Stanton-Drew.

Within 50 yards of it, in 1795, was found in another natural cavern, 30 feet deep, an ancient catacomb or interment of the dead.

consisting of near fifty perfect skeletons lying parallel to each other, some of whose bones were petrified.

It is of fine Corinthian brass, and weighs full $8\frac{1}{2}$ times its bulk in water, and I apprehend was an instrument of war. In 1789 there is an account of another catacomb discovered within half a mile of this, which contained near a hundred of these skeletons, not indeed petrified.

Yours, etc. H. W.

[1810, Part I., p. 3.]

Have the goodness to insert the following singular discovery in your next, for the information and opinion of the literati and antiquaries. In the latter part of the month of April, and the beginning of May, 1809, Mr. John Bell Hardwick, of Burcott, in the parish of Worfield, in the county of Salop, having occasion to remove a great mass of accumulated soil from the base of an irregularly-terminating rock, and the precipice above it, over his meadow-ground adjoining, on 9th May his workmen found the remains of a large semicircular cave, in which were discovered many human bones, particularly the *vertebrae*, two finger-bones, a leg-bone, the arm-bone which connects itself with the shoulder, and several ribs scattered about in various directions. At the north end of the interior of the cave, about 5 feet from the level of the ground, on the ledge of the rock (18 inches wide), were found two human skulls near together, deposited sideways, and the scalp-bone of a child; as also the skull and jaw-bones of a dog, the lower-jaw of another dog, and those of a sheep and a pig, and one of some small animal, which likewise lay in the same position, at a short distance from each other. In the latter were many teeth, but not so sound as those in the human skulls. Many other bones of animals were also discovered, among which were the shanks of deer: some of the animal-bones had been broken to pieces, in all probability previous to their having been laid there. At the same time there was perceived an hearth, with an appearance of ashes, reduced to an extremely fine powder, with a very few scraps of charcoal lying about, seemingly produced from the oak; and two small pieces of flint for procuring fire were also found. The human skulls and bones, with some of the bones of the animals, were completely immured in a kind of chalky substance, which ran perpendicularly through a chink or cleft of the rock in a narrow stratum; the skulls were filled with it, and such of the bones as it surrounded or covered were well preserved; the roof-bone of the mouth, with the teeth in these skulls, were sound, and the enamel of the teeth nearly as perfect as of a healthy person recently dead. The teeth appeared to be all complete except three or four in the front. The upper jaw of the first skull found, with the roof-bone, were accidentally broken off and destroyed by the person using a mattock to bring down the soil at

the time of the discovery. This skull, having been covered in part with common earth and chalk, was not quite so perfect as the other.

On the following day Mr. Hardwick, after having had the whole space within the cave cleared out, discovered another human skull lying on its side, upon the ledge of the rock, at the inner extremity of the cave, about the same distance from the ground as the others. It appeared as if forced into the rock by violence; and being also overwhelmed with chalk, its preservation may be attributed to that incrustation. Within this skull were many small snail-shells, and a quantity of the chalky substance; the teeth were equally as sound and perfect as in those found in the preceding day, with the exception only of the two in the front. The wise-teeth were just approaching above the jaw-bone, considerably lower than the others, tending to show that this must have been a young person; the palate, or roof of the mouth, was also well preserved; so that the little irregularities therein were clearly to be seen of a bright or polished surface. It is singular that no part of the lower jaw-bone of the human subject was in any one instance to be found in the cave.

[The remainder of the article is occupied by conjectures as to the origin of this cave.]

[1822, Part I., p. 161.]

Last autumn, through the activity of Mr. Harrison of Kirby Moorside, an horizontal cave or opening was discovered, in working a stone quarry a little below Kirkdale Church, Yorkshire. On the 2nd of August it was explored to the extent of 100 yards or more in length; from 2 to 7 feet in height; and from 4 to 20 feet in width; but contracting and expanding its dimensions as it advances eastward under the adjacent and incumbent field. The present opening is estimated to be about four yards below the surface of the ground, on the side of a sloping bank, and the cap or covering is principally rock. On the floor of this cave or opening was found a considerable quantity of loose earth, chiefly calcareous, amongst which were animal remains, much decayed. Several bones of immense magnitude, teeth, horns, stalactites, etc., were collected, which appear to have been those of the bear, the rhinoceros, the stag, etc. Whether these remains are to be referred to the antediluvian world, or the cave may have been subsequently the resort of the above animals, if they ever existed in this island, it is for geologists to consider.

[1822, Part I., p. 352.]

In p. 161, we noticed the discovery of an ancient cave in Yorkshire. The following is a minute and interesting detail extracted from the "Annals of Philosophy." The paper was communicated by Mr. Buckland. It gives a curious account of an antediluvian

den of hyænas discovered last summer at Kirkdale, near Kirby Moorside in Yorkshire, about 25 miles north-east of York.

The den is a natural fissure or cavern in oolitic limestone extending 300 feet into the body of the solid rock, and varying from 2 to 5 feet in height and breadth. Its mouth was closed with rubbish, and overgrown with grass and bushes, and was accidentally intersected by the working of a stone quarry. It is on the slope of a hill about 100 feet above the level of a small river, which during great part of the year is engulfed. The bottom of the cavern is nearly horizontal, and is entirely covered to the depth of about a foot with a sediment of mud deposited by the diluvian waters. The surface of this mud was in some parts entirely covered with a crust of stalagmite; on the greater part of it there was no stalagmite. At the bottom of this mud, the floor of the cave was covered from one end to the other with teeth and fragments of bone of the following animals: hyæna, elephant, rhinoceros, hippopotamus, horse, ox, two or three species of deer, fox, water-rat, and birds.

The bones are for the most part broken, and gnawed to pieces, and the teeth lie loose among the fragments of the bones; a very few teeth remain still fixed in broken fragments of the jaws. The hyæna bones are broken to pieces as much as those of the other animals. No bone or tooth has been rolled, or in the least acted on by water, nor are there any pebbles mixed with them. The bones are not at all mineralized, and retain nearly the whole of their animal gelatin, and owe their high state of preservation to the mud in which they have been imbedded. The teeth of the hyænas are most abundant; and of these the greater part are worn down almost to the stumps, as if by the operation of gnawing bones. Some of the bones have marks of the teeth on them; and portions of the foecal matter of the hyænas are found also in the den. These have been analyzed by Dr. Wollaston, and found to be composed of the same ingredients as the album græcum, or white fæces of dogs that are fed on bones, viz. carbonate of lime, phosphate of lime, and triple phosphate of ammonia and magnesia; and, on being shown to the keeper of the beasts at Exeter Change, were immediately recognised by him as the dung of the hyæna. The new and curious fact of the preservation of this substance is explained by its affinity to bone.

The animals found in the cave agree in species with those that occur in the diluvian gravel of England, and of great part of the Northern hemisphere; four of them, the hyæna, elephant, rhinoceros, and hippopotamus, belong to species that are now extinct, and to genera that live exclusively in warm climates, and which are found associated together only in the Southern portions of Africa near the Cape. It is certain from the evidence afforded by the interior of the den (which is of the same kind with that afforded by the ruins of Herculaneum and Pompeii) that all these animals lived and died in

Yorkshire, in the period immediately preceding the deluge ; and a similar conclusion may be drawn with respect to England generally, and to those other extensive regions of the Northern hemisphere, where the diluvian gravel contains the remains of similar species of animals. The extinct fossil hyæna most nearly resembles that species which now inhabits the Cape, whose teeth are adapted beyond those of any other animal to the purpose of cracking bones, and whose habit it is to carry home parts of its prey to devour them in the caves of rocks which it inhabits. This analogy explains the accumulation of bones in the den at Kirkdale. They were carried in for food by the hyænas ; the smaller animals, perhaps, entire ; the larger ones piecemeal ; for by no other means could the bones of such large animals as the elephant and the rhinoceros have arrived at the inmost recesses of so small a hole, unless rolled thither by water ; in which case, the angles would have been worn off by attrition, but they are not.

[1822, Part II., p. 416.]

I am not aware that any communication has been made in your Miscellany, concerning a recent discovery of a somewhat interesting nature, made in the parish of Yattendon, County Berks. Sometime in the year 1819, as a workman was digging for chalk to supply a lime-kiln, the ground suddenly gave way, and the man disappeared. On search being made into the cause of the accident, the entrance was at length found into an extensive cavern or excavation. The writer of this article lately visited the place, and explored, by the aid of torches, a great portion of this interesting remain of an age long since past. It consists of various passages intersecting one another ; the roof formed with no contemptible skill, and supported by square pillars hewn out of the chalk, within a stratum of which the entire cavern appears to be formed. The interior is perfectly dry, and of unascertained extent. The proprietor, who is in the habit of visiting it daily, declares that he has not yet met with a limit. I have little hesitation in attributing the formation of this souterrain to the aborigines of the island, and in classing it with those caverns of a somewhat similar nature, discovered in different parts of the country, and which have been pronounced, almost with the common consent of antiquaries, the dwellings or hiding-places of the Britons. A singular circumstance attached to this place is, that no tradition of its existence has been preserved among the inhabitants of the parish, although, by a date found within, it would appear to have been visited in the early part of the 17th century.*

Yours, etc. W. H. BREWER.

* As a proof that no tradition of the place had been preserved, it may be remarked that no notice is taken of its existence in the answers of the Rev. George Bellas, Rector of Yattendon, to the Berkshire Queries proposed by the Rev. Edward Rowe Mores, in the year 1759.

[1823, *Part II.*, p. 223.]

About the year 1819, two young men undertook to explore a sort of opening or crevice in the rocks on the north side of Seaham Dene, Durham, where, after clearing away the earth to the extent of 15 feet, they discovered a considerable quantity of bones, several human, consisting of skulls with teeth entire, and the rest of birds and quadrupeds. Also among the soil thrown out were found many marine shells, such as cockles, mussels, and limpets.

There was, likewise, among the above a stag or deer's horn, of a pale yellow colour, about 8 inches and a half in circumference at the base, with the usual hollow, consisting of two antlers, one broken, and the other whole, fluted all over, as if by the corrosion of time. The circumference of the larger broken one is $6\frac{1}{2}$ inches. The rock is 20 feet high or more, and ranges along for a considerable way, forming one side of a narrow dell, or dene. R. W.

[1824, *Part II.*, pp. 627, 628.]

The circumstances which led to the discovery of the antediluvian cavern at Banwell, in Somersetshire, are as follows :

Some miners engaged in sinking a shaft in search of calamine, intersected a steep and narrow fissure, which after descending 80 feet, opened into a spacious cavern, 150 feet long and about 30 feet wide, and from 20 to 30 feet high. From the difficulty of descending by this fissure, it was lately judged desirable to make an opening in the side of the hill a little below, in a line which might lead directly to the interior of the cave. This gallery had been conducted but a few feet, when the workmen suddenly penetrated another cavern of inferior dimensions to that which they were in search of, and found its floor to be covered, to a depth which has not yet been ascertained, with a bed of sand, mud, and fragments of limestone, through which were dispersed an enormous quantity of bones, horns, and teeth. The thickness of this mass has been ascertained by a shaft sunk into it, to be in one place nearly 40 feet. Many large baskets full of bones have already been extracted, belonging chiefly to the ox and deer tribes ; of the latter there are several varieties, including the elk. There are also a few portions of the skeleton of a wolf, and of a gigantic bear. The bones are mostly in a state of preservation equal to that of common grave bones, although it is clear from the fact of some of them belonging to the great extinct species of bear, that they are of antediluvian origin. In the roof of the cave there is a large chimney-like opening, which appears to have communicated formerly with the surface ; but which is choked up with fragments of limestone, interspersed with mud and sand, and adhering together imperfectly by a stalagmitic incrustation. Through this aperture it is probable the animals fell into the cave, and perished in the period preceding

the inundation by which it was filled up. The immense quantity of the bones shows the number of individuals that were lost in this natural pitfall to have been very great. In this manner cattle are now continually lost by falling into similar apertures in the limestone hills of Derbyshire. There is nothing to induce a belief that it was a den inhabited by hyænas, like the cave of Kirkdale, or by bears, like those in Germany; its leading circumstances are similar to those of the ossiverous cavities in the limestone rock at Oreston near Plymouth.

[1825, *Part II.*, p. 628.]

Professor Buckland has lately examined two caves in Devonshire, in both of which he found, in a bed of mud beneath a crust of calc-sinister, gnawed fragments and splinters of bones, with teeth of hyænas and bears. There were no entire bones, except the solid ones of the toes, heels, etc., as at Kirkdale, which were too hard for the teeth of the hyæna. They appear simply to have been dens, but less abundantly inhabited than that of Kirkdale. In the same cave Professor Buckland found one tooth of the rhinoceros, and two or three only of the horse.

[1827, *Part I.*, p. 351.]

In the summer of 1826, as some workmen were quarrying stones in Uphill Hill, Somerset, they crossed a fissure containing a quantity of bones. In the course of further search were discovered bones of the elephant, rhinoceros, ox, horse, bear, hog, hyæna, fox, polecat, water-rat, mouse, and birds. Nearly all the bones of the larger species were so gnawed and splintered, and evidently of such ancient fracture, that little doubt can exist that it was a hyæna's den, similar to Kirkdale, and Kent's Hole. The bones and teeth of the extinct species of hyæna were very abundant. The more ancient bones were found in the upper region of the fissure, firmly imbedded; further down, in a wet loam, there was an innumerable quantity of birds' bones only, principally of the gull tribe. These Professor Buckland supposes to have been introduced by foxes. The cavern extends about 40 feet from north to south, varying from 14 to 6 feet from east to west. At its entrance the floor was found covered with sheep-bones, and on digging into the mud and sand of which it consisted, several bones of the cuttle-fish were found, and the pelvis and a few bones of the fox. The fissure is vertical, about 50 feet deep from the surface to the mouth of the cave, and is situated at the western extremity of Mendip, in a bold mural front of limestone strata. The greater part of the bones have been presented to the Bristol Institution; Mr. Buckland has a few specimens, and the Geological Society in London a few more.

[1828, *Part II.*, p. 168.]

As some quarrymen were lately levelling the ground before Litfield Place, near the new observatory on Clifton Down, County Gloucester, they found the ground unusually hollow, and on making an opening, a shaft about 13 feet deep was discovered, on descending which they were led into an apartment or cave, nearly 13 or 14 feet high, in the direction leading to the Avon river, and to which there evidently appeared to have been once a communication, but which is now stopped up with rubbish and dirt. It is not improbably supposed that it either was, or led to the cavern which is called in some of our old Chronicles the Cave of St. Vincent.

[1835, *Part II.*, p. 303.]

A singular discovery has been made in the parish of Tinwell, near Stamford, of a large subterranean cavern, supported in the centre by a stone pillar. The labourers of Mr. Edward Pawlett were ploughing in one of his fields, abutting on the road from Tinwell to Casterton, when one of the horse's feet sank into the earth, by which the discovery was made. A more minute investigation having taken place, it was found to be an oblong square, extending in length to between 30 and 40 yards, and in breadth to about 8 feet. The sides are of stone, the ceiling is flat, and at one end are two doorways, bricked up.

[1831, *Part I.*, pp. 19, 20.]

Having frequently received several interesting specimens of organic remains from the caves of Blackdown Hills (Devon), I had long contemplated to visit them, more especially having also another object in view, of examining the curious variegated flints and siliceous substances, with which I knew the surface of those eminences was overspread; and lately, in a mineralogical excursion in that neighbourhood, I accomplished my design, and beg leave to submit to your notice a few cursory sketches and observations on the subject connected with my ramble.

The north-east side of Blackdown is situated within 20 miles of this city, and is plainly observed at no great distance on the road from Cullumpton to Wellington. I was informed that the estate where the greater number of these caves are situated, consists of 300 acres of land, the property of a gentleman of Honiton, but that the strata containing the caves were let separately, for the purpose of excavating a sandstone of a peculiar quality for sharpening iron; these whetstones are manufactured on the spot, and considered the best of the kind in England; and a small trade is carried on of them at Cullumpton, and sent to different parts of the kingdom. On my arrival at a short distance from Blackdown, I ascended to the summit of the hill, the prospect from which is very extensive, grand, and imposing.

Towards the S.W., about sixteen miles distant, part of the English Channel is seen ; though this delightful picturesque scenery was so animating, I was still more gratified on looking beneath my feet, to behold the chequered, mossy coating of the earth, strewed over with countless coloured flints of various hues, many of them magnificent, and of the brightest colours. I selected some of the choicest to deposit in my cabinet collection, as a precious addition, far surpassing any I possessed before. Among them were some singularly fine, viz., one that the greater part had passed into a light transparent crystallization, bordered with a rich ruby red ; another that had turned into an orange-red carnelian, but more diaphanous ; one into a deep crimson jasper, and another of a light amber complexion, speckled with flowery golden spots, etc. These flints, which are so diffusely scattered over the Blackdown and Halsdown Hills, seemed to perplex Deluc how they could come there. I consider that they were an immense shower of large and small pebbles which were thrown from the coast at the deluge, and in process of time obtained their present siliceous quality ; for the loose fossil shells found here near the surface are often of the same substance ; as I have met with large fossil bivalve shells become black flints ; also clumps of fossil univalves and bivalves from the same hills, that have passed into red jasper of a very fine texture.

Proceeding on my route easterly, I stretched at too great a distance beyond the caves. I then turned to the left to a steep declivity, and with difficulty descended, it being almost perpendicular, and about half-way down the hill alighted on a compact sand-bank terrace, which extended the whole length and range of the entrances to the different caves, which were of a western aspect, and nearly similar to each other at the openings, from 5 to 6 feet in height, and 4 broad, but wider and higher internally, extending horizontally, more or less, from 200 to 300 feet, and some ancient ones, which are now closed, were 400 feet and upwards ; but the length of time it required in conveying the sand-stones to the mouth of the cave, rendered it more convenient to cut new apertures, as it would be liable to imminent danger to widen the caves too near each other ; for should the mass give way, the workmen must inevitably be crushed to death. The fine ruby complexion of the youths employed in excavating the earth excited my surprise, as it exceeded the usual flush of nature ; also as I stood at the mouth of the cavern, I saw a tall, slender old man, coming out of the gloomy recesses, whose visage was a light carmine, the colour probably the effect of some peculiar essence arising from the bowels of the earth. The men behaved well, rationally replied to my interrogatories, and assisted me in procuring fossils, which consisted of several clumps and groups of univalves and bivalves, small white nodules of different sizes, round as marbles ; trigonia aliformis, fig-formed alcyonite, poppi-formed alcyonite, and lemon-shaped alcyonite.

This last so exactly resembled the lemon that some fine specimens I possess would, at a short distance, be mistaken for them. The sandstone containing the fossils was so damp that with little exertion I could break it asunder with my hands to sort out the shells, and applying them to my mouth, by the taste appeared to retain their original sea-salt quality. This vast mass and beds of marine substances is a totally distinct sea-deposit from that at Halsdown, at only a comparative short distance, the fossil species and variety are manifestly different; the spacious and lofty Woodbury Common lies between them, in which are no marine fossils, and clearly evinces was never the bottom of the sea, as I have examined more than ten times over the greatest depths that have been penetrated in this common, and could never discover a relict of them. The Blackdown sandstone deposit is very abrupt, and appears of greater length than breadth, and was lifted up from the ocean from a north-eastern direction.
[The remainder of the article is purely speculative.]

S. WOOLMER.

[1867, Part I., pp. 357, 358.]

Since the days of Camden, the caves on the north shore of the Thames near Tilbury have, now and then, excited the attention of a few of the more active antiquaries, without receiving any satisfactory explanation. Camden concluded that they were of British origin, and were constructed for the purpose of storing corn, as underground granaries. Up to the present day, these pits, as well as others of the same kind in various parts of Kent, seem never to have been clearly understood; and, somewhat strangely, have been the subject of various opinions and theories, without eliciting, so far as I can see, a solution beyond the possibility of objection. The most recent account of these caves, in or adjoining the villages of Chadwell and Little Thurrock near West Tilbury, appears in the *Building News* of February 1st in the present year; and as these caves seem precisely similar to the pits in Kent, where chalk abounds at no very great depth, they may all be included in the clear description given in the *Building News*, the result of an investigation made by some explorers, with care and discrimination:—

"A party of adventurers have, however, recently organised a visit, and one of them obliges us with notes of what he saw. These Dene holes, as the country people call them (? Dane holes), are situated in a wood called Hairy-man's Wood, in the parish of Tilbury. They had brought a long stout rope, and had tied a short stick at one end, and invited us one by one to sit across the stick and allow ourselves to be lowered down the crater, and down the shaft of unknown depth to which the crater formed a convenient funnel. It looked ugly, but one of us volunteered to make the first descent. The shaft was about 3 ft. in diameter and about 85 ft. deep. At the bottom of the shaft

we came to a cone some 25 ft. high, which would just have filled the crater above, since it consisted of the loose soil which had crumbled in from the sides of the shaft and formed the crater. At the bottom of the shaft were two openings opposite to one another, each of which gave access to a group of three caves. The ground-plan of the caves was like a six-leaved flower, diverging from the central cup, which is represented by the shaft. The central cave of each three is about 14 yards long and 4 yards wide, and about 6 yards high. The side caves are smaller, about 7 yards long and 2 yards wide. The section is rather singular : taken from end to end, the roof line is horizontal ; but the floor line rises at the end of the cave, so that a sketch of the section from end to end of the two principal caves is like the outline of a boat, the shaft being in the position of the mainmast. The section across the cave is like the outline of an egg made to stand on its broader end. They are all hewn out of the chalk, the tool marks, like those which would be made by a pick, being still visible. A good deal of loose chalk lies on the floor, fallen probably from the sides. It is under this chalk that there is a chance of finding some traces of the original use of the caves ; the caves were dry, and the air pure. We descended another shaft which led into other caves, much like in plan and dimensions to those above described. If the rest of the open and closed and conjectured shafts led to similar caves, the total amount of cave room is very considerable. We saw nothing which would give a clue to the purpose for which these singular excavations were made, or to the date of their excavation, unless the pickmarks which we saw indicate that they were dug out, not with flint or bronze celts of the usual shapes, but with a metal tool like a pick of later date than the age of celts. We were told there are similar Dene holes on the south side of the river, which we hope to explore some day."

The name *Dene*, or *Dane*, is one of the popular appellations, not uncommon in Kent, given to fields and places which contain remains of antiquity unintelligible and mysterious, and ascribed, ages since, to the Danes, when their invasions were comparatively new in tradition. That many of these pits are of very remote antiquity, there can be no doubt ; but that they ever served as granaries, or as dwelling-places, is highly improbable, unless under some very exceptional circumstances. They are found nowhere, I believe, but where chalk abounds ; and this fact induced me, years ago, to inquire of my friend, Mr. Bland (one of our first authorities in matters relating to agriculture), whether they were more or less than *chalk pits*? Mr. Bland at once confirmed my opinion, and assured me that occasionally they were used at the present day ; and that he knew quite recent instances of their being sunk.

The most conclusive evidence of the antiquity of these chalk pits is afforded by Pliny, the naturalist, whose testimony has, somewhat

strangely, been overlooked. Speaking of the various kinds of earths, and especially of *marls* (a Gaulish and British word, he remarks), he describes the *white chalk*, called *argentaria*—that is to say, the finer kind, such as is used by silversmiths for cleaning plate. It is obtained, he says, by means of pits sunk like wells, with narrow mouths, to the depth, sometimes, of 100 feet, when they branch out like the veins of mines; and this kind is chiefly used in Britain.*

It is evident that some of these pits must be anterior to the time of Pliny, and probably many centuries. Varro, who was contemporary with Cæsar and Pompey, speaks of the use of chalk in Gaul for manure as something remarkable and novel to him, an Italian.† The great naturalist is as much at home in describing the British and Gaulish marls, their respective powers and duration as manure for land, as if he had travelled so far north on purpose to obtain information. But interesting as the information is, it belongs to the subject of agriculture; and my object is to rectify opinions respecting these ancient subterranean monuments. There is an interesting inscription, however, which should not be forgotten in connection with the British chalk and marl. It is a dedication by a successful dealer in British chalk, who, in consequence of having prosperously imported into the low country, now known as Zealand (where the inscription was found), his freights of chalk, discharged his vows to the goddess Nehalennia.

C. ROACH SMITH.

[1863, Part II., p. 286.]

A cavern similar to those found in England and on the Continent containing osseous remains of men and of lower animals, has lately been discovered on the property of Mr. John Malcolm, of Poltalloch. By the liberality of that gentleman the cavern has been fully explored, and its contents carefully collected by the Rev. Messrs. Mapleton and Macbride. These contents consist of the remains of men, of other animals, and shells of edible shellfish. The only article of manufacture found in it was a small celt, a flint flake; and the only domestic utensil was a scallop-shell, or *pecten maximus*—the shell used by the ancient Celts as a drinking vessel. The cavern was evidently used as a place of residence, for beneath the cave stuff, or *débris*, were found ashes, bits of charred wood, and bones, a flint pebble for striking fire, and stones which, from their form and position, seemed to have served for seats. When first discovered, the

* Alterum genus albæ cretae argentaria est. Petitur ex alto, in centenos pedes actis plerumque puteis, ore angustatis; intus, ut in metallis, spatiante vena. Hac maxime Britannia utitur.—“Nat. Hist.” lib. xvii., cap. viii.

† In Gallia Transalpina intus ad Rhenum cum exercitum ducarem, aliquot regiones accessi, ubi nec vitis, nec olea, nec poma nascerentur ubi; agros stercorarent candida fossicia creta.—“De Re Rustica,” lib. i., cap. 7.

human remains were supposed to have been those of persons who had fled there for shelter when the adjacent country was laid waste by fire and sword during the ruthless raid of Alister M'Coll Catto. The absence, however, of metal weapons and culinary vessels, both which were of universal use in the days of this scourge of Argyleshire, and which undoubtedly would have been conveyed by the refugees to their place of concealment, and the presence of celts and scallop-shells, seem to disprove this opinion, and to point to a much higher antiquity for its inhabitants. What seems to confirm this opinion is the fact that many of the bones, teeth, and shells are as firmly embedded in a calcareous matrix as are the fossil remains in the lias and carboniferous limestone. Mr. Macbride is engaged in examining its contents and preparing a report on the subject, which, it is to be hoped, will throw additional light on the history of this cavern and its occupants.—*Glasgow Herald.*

Scottish Sculptured Caves.*

[1865, Part II., p. 579.]

A discovery has just been made in one of the many caves which occur on the coast of Fife, near Wemyss, which is of much interest.

It is known that many of these caves were used in the early ages of Christianity in this country as retreats of anchorites and as places of worship. A cave at Caiplie, near Anstruther, is believed to have sheltered St. Adrian, and its walls are sculptured with many crosses of simple outline, the devotional expression of its early occupants; while cuttings in the rock seem to point out the site of the altar and other ecclesiastical arrangements. The cave of St. Rule at St. Andrews is of this description.

On Thursday last [Sept. 21] a party from Edinburgh, consisting of Professor Simpson Mr. Joseph Robertson, Professor Duns, and Dr. Paterson, of Leith, while rambling in the neighbourhood of Wemyss, were led to inspect some of the caves in that quarter. In one of them they found a kitchen-midden, containing the bones of many animals, which had been split for the sake of extracting the marrow, and some of which were artificially pointed.

On entering the next cave they were startled on finding one of its walls sculptured with the forms of several "elephants," "spectacles," birds, fish, and other animals and objects which are now familiar from their frequent occurrence in Mr. Stuart's work, "The Sculptured Stones of Scotland," while small crosses, of early type, are cut in various parts of the cave.

Some of the other caves bear abundant marks of recent carvings,

[* Although this and the following article do not strictly fall under the title which has been given to this section of our subject, it is interesting and instructive to see how cave dwellings have survived.]

the walls being absolutely covered with the names of recent visitors cut out on the rock. To avoid the risk of injury to the unique sculptures now discovered, the cave will henceforth be secured from indiscriminate admission. Since the discovery, these figures have been inspected by Mr. Stuart, who means to give accurate drawings of the whole in the second volume of "The Sculptured Stones of Scotland," now almost completed.—*Aberdeen Journal.* [See Note 4.]

Caves in Ireland.

[1861, Part II., p. 357.]

We reprint the following letter, which has appeared in the *Dublin Evening Mail*, in the hope of obtaining information upon the matter from some of our Irish correspondents [see Note 5] :—

"Ballinasloe, September 13.

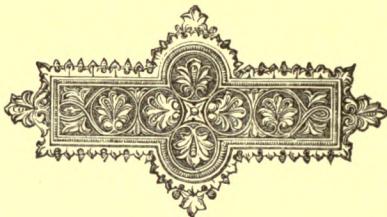
"In the month of July last I sent you the particulars of some ancient regal ornaments which had been found by a countryman, and purchased from him by the Messrs. Hynes of this town. The notice I then wrote attracted general attention throughout the country, and several persons expressed an anxiety to obtain the ornaments, which were of pure gold, and consisted of a crown and collar. An intimation was even sent to the authorities, under the regulations of treasure-trove, demanding the ornaments—of course, at their proper value. They have since been publicly exhibited in the collection of the Dublin Society, and much admired by those who relish antiquarian researches. The Messrs. Hynes offered the countryman a handsome *douceur* if he would point out where he found the relics; but this the wily native knowingly declined to do, no doubt expecting that other articles of value might yet be discovered in the same locality. He has, however, at length divulged the particulars.

"The man resided at a place called Skea, near the celebrated ruins of Clonmacnoise, on the brink of the Shannon. In the course of some agricultural operations he removed a large flag, which opened the passage to a spacious cavern, in which were found the crown and collar, together with some ancient bronze weapons and several utensils used for culinary purposes. The discoverer of this singular labyrinth kept it concealed from the knowledge of anyone for a considerable length of time, but at length he has been induced to show it to a few individuals under a promise of secrecy; and, as he is about to leave this country for Australia, he intends for a consideration to lead the way to this curious subterranean chamber, evidently the retreat of the ancient monarchs who reigned in the locality.

"A friend of mine, who has been in the cavern, says that he was so fortunate as to have unveiled to his astonished view the intricacies of this hidden apartment and many singular vestiges of a defunct race. It was, no doubt, at once a fortalice and residence. The

hard-pressed chieftain and his followers found in its recesses the most perfect security and concealment, for if any pursuers had the temerity to tread the tortuous windings of the entrance, certain destruction was sure to reach them ere they arrived at the apartments, several feet below the surface of what appears to be a limestone crag.

"I forgot to say that among other relics of bygone days are ten elaborately ornamented slabs, of an octagonal form, and bearing long inscriptions in the Ogham character. There are few who will be able to unravel the story which these venerable records display to the eyes of the curious. No doubt they will yet form the subject of study and research to the antiquary and the learned. The discovery of this wonderful cavern throws much light on the legends of Brien O'Donoghoe, and to this means of retreat from his enemies is no doubt due the story of his compact with the Evil One, from the consequences of which the Abbot St. Kieran is said to have released him. I intend to explore this retreat of the ancient chieftains of this neighbourhood on an early day, and to supply you with a description in detail."



Early Historic Remains.



EARLY HISTORIC REMAINS.

Ancient Timber Foundations, Etc.

[1795, *Part II.*, p. 1050.]

SOME workmen lately (Nov. 5), in digging the foundation for a bridge erecting over the Severn at Buildwas, Shropshire, discovered a large piece of oak timber at a considerable depth below the surface of the earth, and near to it a very curious brass sword. From various circumstances, this weapon is supposed to be of Carthaginian origin. These antiquities, we understand, are now in the possession of W. M. Moseley, Esq., of Glassampton, County Worcester.

[1811, *Part II.*, p. 476.]

A large oak tree, nearly 30 feet long, and upwards of 12 in circumference, has recently been discovered in the Clyde, about half a mile below Thankertonbridge, on the property of the Earl of Hyndford. It seems to be pretty solid; but, as it lies three fathoms below the surface of the water, and mostly covered with the channel of the river, any attempts that have been made to remove it have proved ineffectual. There is a tale so old as to be nearly traditional, that some very large oak trees formerly grew at Lamington, the purchaser of which endeavoured to float them down the river, but, owing to the gravity of oak timber being nearly equal to water, some of them were lost. It is well known, that the vast extent of wood from which Selkirkshire still retains the name of the Forest, stretched westward into this county; and some of the fruitful and well-sheltered dells of Coulter, or Lamington, may justly claim the merit of having fostered this noble proof of the ancient grandeur of Scottish timber.

[1837, *Part II.*, p. 409.]

The labourers who are excavating the common sewer in High Street, St. Giles, Westminster, lately discovered just opposite the church two elm trees, in a high state of preservation, at a depth of

about 15 feet under the surface of the ground, lying completely across the part undergoing excavation, and being parallel to each other, though at a distance of several yards. They were obliged to be sawn through, and the pieces which were removed to the surface were each about nine feet long, and five in circumference. These trees are supposed to have belonged to a forest which once covered this and the surrounding district. On examination, the exhumed timber was found to be as sound as if it had been felled only a few months. The superincumbent strata were composed of common rubble, clay, and sand, the whole of which were remarkably dry to the above depth.

[1839, *Part II.*, p. 410.]

The capacious bonding-pond, which is now being excavated at South Stockton, has led to the discovery of an extensive subterranean forest. The timber is chiefly oak. A yew tree, of considerable size, has been found, the wood of which is sound and good, and fit for the turner's lathe. Many of the oaks are of large dimensions, and it is expected some of them will be suitable for the purpose of building. Whilst examining this forest, Dr. Young, of Whitby, with some friends, discovered one of the oaks to have been cut in two, which had evidently been done previous to its being covered by the earth. He supposes the forest may have been cut down by the Roman soldiers, as they were in the habit of laying timber on the low swampy grounds, for the purpose of making roads. Be this as it may, it is certain the hand of man has been exerted on the timber, and it may form a fertile subject for the lover of ancient history and the geologist to speculate on.

[1820, *Part II.*, pp. 350, 351.]

In cutting and carrying away a part of Castlefield, near Manchester, to make the ground level near a new warehouse, lately erected on the banks of the canal, a very ancient well was discovered about four yards below the level of the field, which has been cut down for the above purpose. The well was square, and was formed of four upright posts, driven at the four angles into the bed of clay, and closed in by other logs of wood, placed, one upon another, in the simplest manner, on the outside, so as to form a kind of chest, which was floored with the same rude materials. The logs were rudely hewn; they had evidently never been sawn, either on the sides or ends; were about five or six inches square, and together formed a hollow cube of four feet. The upper logs were level with the top surface of a bed of clay, by which the well was surrounded, and into which the timber had been inserted. The wood when first discovered had little more consistency than paste, but on its exposure to the air became much harder, and more wood like; it was perfectly black, and so

much of a coal-like appearance as to favour the theory of such naturalists as suppose that pit-coal was originally a vegetable substance. At the bottom of the well a quantity of large stones, such as in this neighbourhood are called bowlers, were found ; they were black and dirty, as though they had been taken from a sewer. The clay which adhered to the timber had also changed its colour by its proximity, from the rusty iron tinge of the native clay, to the appearance of the inferior potters' clay found in Dorsetshire. Over the well, unbroken, were various strata of sand and gravel, which, as the bank was broken down, gave proof that, except for about a yard and a half below the surface of the field, it had never been exposed to daylight since the strata was laid by the disposal of a flood. The part which the section discovered to have been acted upon by human industry, was very visible to the depth of about a yard ; and a few yards to the west of the part beneath which the well was discovered, the remains of a part of the foundation of the ancient fortification built by the Romans afforded evidence by contrast of colours, that the materials immediately above the well were already there, and that the well was lost—buried by the wreck of some great flood—before the Romans began to dig the foundations which are to this day so great an object of curiosity to antiquaries. In all human probability the well was the work of the ancient Britons (before they knew how to cut stone), so as to serve for the purpose of a well, and before saws were in their possession ; and as the spring from which that well had been supplied turned out in another place, in the same bank, after the woods, the old well was soon forgotten. In all human probability the work now discovered is upwards of 2,000 years old, for it is 1,741 years since the Romans settled here ; and the section of the foundation which intersects the line of strata above the well is proof that they were not aware of its existence.

[1843, *Part I.*, pp. 303, 304.]

Last autumn a peasant named Thomas Power, who holds a few acres of ground in the townland of Kilbarry, immediately outside the deer-park wall of Castlecor, dreamed that there was a large quantity of gold and other treasure buried deep beneath the ruins of an old Danish fort, which lies on the ground. After he awoke, he lay musing for some time, until sleep overcame him again, when the same dream occurred to him a second time, as also a third time, on the same night. The last time he awoke the day dawned ; he got up and called one of his sons, to whom he communicated his dreams ; with eagerness they proceeded to the spot to which the dreams and accurately directed them ; they surveyed the place with deep anxiety for some time, and at length perceived a scarcely perceptible hollow in the ground, as if a drain had once been there which time had filled up. The fort is situated on the top of a small glen, through which,

or along which, a small stream runs. This stream divides the lands of Kilbarry from Drummin. The drain from the first went towards the rivulet, like the tail-race of a mill, and here it was they commenced operations. They first discovered a bed of rich manure, which they were raising and drawing away for a fortnight ; they took out 300 horse-loads, making an opening towards the fort 30 feet in length, 11 feet deep, and wide enough for a horse and cart to turn in. Their work was at length impeded by a large piece of timber, from which they cleared the manure with great labour, and discovered a perfect tank, 12 feet square and 3 feet deep, made of black oak, each plank 4 inches thick, it resting upon four pillars or legs, 2 feet high and 1 foot square. Into the tank was a shoot, as if to convey water, made of the same timber, one foot wide at the mouth, the whole in almost perfect preservation. How it was joined could not be ascertained, as the labourers took it asunder when they found it ; but there was no appearance of nails ; the joints appeared decayed. The tank was buried 11 feet under the ground.

[1819, *Part II.*, pp. 541, 542.]

Some time ago, in digging to make gas tanks at the Low Lights, near North Shields, in a place called Salt Marsh, in Pow Dean, at the distance of 12 feet 6 inches from the surface, the workmen came to a framing of large oak beams, black as ebony, pinned together with wooden pins or tree-nails : the whole resembling a wharf or pier, whither ships drawing 9 or 10 feet water had come. Mussel-shells lay under an artificial spread or coating of fine clay, as in the bed of a river. Julius Agricola, about the eighty-third year of the Christian era, had his fleet in the Tyne ; but tradition says he moored it in the brook Don, near where Jarrow Church now stands ; he may have also moored some of them in this place (opposite to the Roman station, near South Shields), as it has been a secure estuary at the mouth of the Pow Bourne, guarded from the sea by a peninsula of clay and sandy land, now called the Prior's Point, whereon Clifford's Fort was built in 1672. Large oak trees were also found, hollowed out as if to convey water. Had there been found any scoriae, or calcined stones, conjecture might have pointed to salt-works having been here ; but, on the contrary, few stones were found, only sandy black mud 12 or 13 feet deep, and one freestone, squared out in the middle to hold the foot of a wooden pillar : hammer-marks were visible in the sides of the square hole. On the side of the peninsula above referred to, next to the estuary, salt-pans were working in the time of the Priory at Tynemouth, probably as early as the year 800, and so to the dissolution in 1539 ; and according to Brand, and other records belonging to the Duke of Northumberland, the Pow Pans were making salt in the reign of Elizabeth ; and in 1634, the Corporation of the Trinity-House, Newcastle, bought land near Tolland's,

Delaval's and Selby's Pans, to erect their Low Lights upon. Much of the oak moulders away on being exposed to the open air; but some beams and planks are preserved, out of which it is intended to make chairs, etc. The Danes often moored fleets in the Tyne, during their incursions, in the ninth, tenth, and eleventh centuries.

On the Naval Power of the Ancient Britons.

[1849, Part I., pp. 592-597.]

A passage is extant in Xiphilinus which, if literally taken, indubitably implies that the ancient Britons fitted out powerful naval armaments in the reigns of Augustus and Caligula; but so many other passages from ancient authors are apparently repugnant to this, or at least are reputed to be so, that an examination of what is said respecting the vessels of the Britons may not be without interest. We shall find that generally they by no means make the statement of Xiphilinus impossible or even improbable, while a passage in a classic author confirms his words to a remarkable degree. Extracts may therefore follow from ancient authors, and at the conclusion of them that which has been alluded to from Xiphilinus, accompanied by its presumed corroboration.

The ancient British chronicles, could we rely on their authority, would at once obviate the necessity of the present inquiries, as they in several instances speak of the fleets of the Britons: these historical documents are, however, far too apocryphal in their earlier parts to be of any use. It is necessary therefore to set aside their testimony altogether as regards our present subject.

Whoever has referred to Lucan and Pliny will see that the Britons are described in those authors as possessing solely barks covered with bullocks' hides in which they navigated the ocean. Lucan's mention is lib. iv. 130:

"Utque habuit ripas Sicoris camposque reliquit
Primum cana salix madefacto vimine parvam
Texitur in puppim, cæsoque inducta juvenco
Vectoris patiens tumidum superenatat amnem.
Sic Venetus stagnante Pado, fusoque Britannus
Navigat oceano: sic quum tenet omnia Nilus
Conseritur bibulâ Memphis cymha papyro."

Of this the following may be given as the version: "When the river Sicoris began to subside, and to be contained within its banks" (by Cæsar's orders, see his *Commentaries, Civil Wars*, i. 54), "first the hoary osier with its moistened twigs is woven into a small ship; and then covered with the hide of a slain bullock it supports its navigator upon the swollen stream. Thus the Venetian navigates the stagnant Po, and the Briton the wide-spread ocean; and thus, when the Nile overflows, the Memphian boat is interwoven of the bibulous papyrus."

In Pliny's *Historia Naturalis* there are several passages to the

purpose. One in book iv. 30 (16). “Timæus historicus a Britannâ introrsum sex dierum navigatione abesse dicit insulam Mictim in quâ candidum plumbum proveniat; ad eam Britannos vitilibus navigiis corio circumutsis navigare;” i.e., “Timæus the historian says that the island of Mictis, where tin is found, is within six days' sail from Britain; and that the Britons navigate to it in vessels of wicker-work covered with leather.” Another, vii. 57. “Plumbum ex Cassiteride insulâ primus apportavit Midacritus. Etiam nunc in Britannico occano vitiles (naves) corio circumutsæ fuent;” i.e., “Midacritus was the first who brought tin from the island of Cassiteris. Even now vessels of wicker-work are to be found in the British ocean.” Further, in book xxxiv. 47 (16) he says, “Sequitur natura plumbi, cuius duo genera, nigrum atque candidum. Pretiosissimum candidum a Græcis appellatum cassiteron, fabulosèque narratum in insulas Atlantici maris peti, vitilibusque navigiis circumutsis corio advehi. Nunc certum est in Lusitaniâ gigni, et in Gallæciâ, summi tellure arenosâ et coloris nigri. Pondere tantum eâ deprehenditur. Interveniunt et minuti calculi, maximè torrentibus siccatis. Lavant eas arenas metallici, et quod subsedit coquunt in fornacibus;” i.e., “The class of metals of the nature of lead comes next; of this there are two sorts, the black and white. The white is the most valuable, called by the Greeks ‘cassiteron,’ tin, and is fabulously narrated to be sought in the islands of the Atlantic sea, and brought in vessels of wicker-work sewed round with leather. Now it is certain that it is produced in Lusitaniâ (Portugal) and in Gallæcia (i.e., Callæcia, Gallicia in Spain and the north of Portugal), being found there in a sandy soil on the top of the earth and distinguishable from it solely by weight. Small pebbles of it are also found, principally in the dried-up beds of torrents. The workmen wash those sands, and what subsides they roast in furnaces.” In book xxiv. 40, he speaks of “sutiles naves,” or ships sewed together; but at that place the method of fastening the planks by sewing them together with thongs, holes being bored through them for the purpose, is solely to be understood; a contrivance we find practised with the larger canoes in the South Seas. Therefore this passage does not apply to our present purpose.

To Pliny succeeds Solinus, an author supposed to have lived about A.D. 225, in the reign of Alexander Severus. He informs us, c. 22, “Mare quod Hiberniam et Britanniam interluit undosum inquietumque toto in anno, non nisi pauculis diebus est navigabile. Navigant autem vimineis alveis quos circumdant ambitione tergorum bubalorum.” That is, “The sea between Ireland and Britain is generally swelling with waves, and untruant the whole year, and only navigable for a few days. They navigate (it) in vessels made of wicker-work, which they surround with a covering of bullocks' hides.”

Further, Festus Avianus, who lived about A.D. 400, in his poem

the Ora Maritima, describing the inhabitants of the *Œstrymenides*—islands which he evidently treats of as in the neighbourhood of Britain, specifying that they were “*metallo divites stanni atque plumbi*,” *i.e.*, rich in the metals of tin and lead—says of their shipping:

“Notisque cymbis turbidum latè fretum
Et beluosī gurgitem oceanī secant.
Non hi carinas quippe pinu texere
Acerēe norunt, non abiēte ul usus est
Curvant faselos; sed rei ad miraculum
Navigia junc̄tis semper aptant pellibus
Corioque vastum s̄epe p̄currunt salum.”

That is, “In their boats, as is well known, they navigate both the stormy narrow seas, and the ocean itself, full of sea monsters. For they have not been accustomed to build ships either of the fir-tree or maple; or to plank vessels with oak, as is usually done at other places; but it may be noted, for the wonder of the thing, that they always cover their barks with hides joined together; and thus using this covering of leather they often traverse the broad seas.”

A passage from Julius Cæsar's Commentaries, Civil Wars, i. 54, should not be overlooked. “Quām in his angustiis res esset; atque omnes viæ ab Afranianis militibus equitibusque obsiderentur; nec pontes perfici possent; imperat militibus Cæsar ut naves perficiant, cuius generis eum superioribus annis usus Britaniæ docuerat. Carinæ primitū et statumina ex levi materiâ fiebant; reliquum corpus navium viminibus contextum coriis integebatur. Has perfectas carris junetis devehit noctu millia passuum a castris xxii., militesque his navibus flumen transportat; continentemque ripæ collem improviso occupat. Hunc celeriter priusquam ab adversariis sentiatur communīt. Huc legionem postea transducit; atque ex utraque parte pontem institutum perficit biduo.” That is, “There being these difficulties, and all the roads being occupied by the soldiers of Afranius, horse and foot; and as there was no possibility of constructing bridges; Cæsar ordered his soldiers to make ships of the same kind as he had seen used in former years in Britain. The keels and framework were first made of light materials; the rest of the vessels, being woven with twigs, was covered with skins. These having transported by night on cars joined together a distance of twenty-two miles, he passed a party of soldiers over the river Sicoris” (see before the passage from Lucan), “and unexpectedly occupied a hill close to the river. This he quickly fortified before his adversaries perceived it. Here he after this conveyed across a legion, and beginning a bridge from both banks finished it in three days.”

St. Isidore of Seville, who wrote in the beginning of the seventh century, in his work *De Originibus*, xix. i., has a passage relating to our subject. He says: “*Carabus parva scapha ex vimine facta quæ contexta crudo corio genus navigii præbet. Papias (prodit autem)*;

carabus navicula discurrens in Pado, id est linter. Est autem ex vimine et corio." That is, "The vessel called a carabus is a small boat made of wicker-work, which, being covered with a raw hide, forms a species of bark. According to Papias, the carabus is a little boat or skiff used on the Po, made also of wicker-work and leather."

What we otherwise chiefly know of this species of vessel is as follows:—Sidonius Apollinaris, who lived in the fifth century, acquaints us that they were used to cross the seas by the Saxon pirates of his day, and several ancient chronicles mention three Irish saints who in the year 891 crossed over in a boat constructed of wicker-work, and covered with hides, from Ireland to Cornwall in seven days; intending to go from thence to Rome, and afterwards to Jerusalem.

All these vessels of wicker-work and hides hitherto mentioned, except those referred to by St. Isidore and his authority, it is evident were not quite boats of the smallest size. They were vessels which navigated the ocean; were sometimes used by pirates in their predatory expeditions; and are called "navigia," *i.e.* ships, by one or two writers. Cæsar, when he builds vessels of this class, is obliged to join two cars together in order to transport them from place to place. In short, in respect to size, they must have been of the dimensions of the larger boats; and the skiff or canoe of wicker-work, and covered with a hide, used for fishing on the rivers, which would seem originally to have suggested this mode of construction, is not brought to our notice by ancient writers except as before specified. This smaller vessel, however, is still in use on the rivers in the west of England, and by its name of "coracle" is well known.

Though it seems the use of wicker-work and hide-covered vessels was not peculiar to Britain (see the passage before quoted from the poet Lucan),* yet, as connected with Britain, they appear to have attracted great notice in times of antiquity, principally, no doubt, from their navigating so tempestuous an ocean with them. However, the possession of these vessels is not necessarily a proof that the ancient inhabitants of this country used no other. Some further inquiry on the subject may be therefore requisite.

One principal testimony that the Britons did not possess shipping

* Herodotus also mentions towards the end of his first book a species of circular vessels or floats, which he describes as resembling rounded, and of course to a certain degree concaved, shields, as we find by the Phigalian marbles in the British Museum those of the ancient Greeks were. These were built by the shepherds of Armenia, who cut down willows to supply the materials of their construction, and covered them with skins. Their lading consisted of straw, casks of palm wine, etc., with which they descended with the stream of the Euphrates to Babylon. He informs us that they were of a larger and smaller size, specifying that some of the former were able to carry a burden of 5,000 talents, or, as nearly as may be estimated, about 125 tons. On their arrival at Babylon, and their cargo being disposed of, they were broken up, their wood-work sold, and the skins re-conveyed to Armenia on the backs of asses, brought down in the floats for that purpose.

is found in the panegyrical writers, those well-known eulogists in the later times of the Roman empire, who addressed complimentary orations to the emperors for various purposes; which flowery effusions are in many cases come down to us, and indeed very frequently afford materials for the historian. In Eumenius, who addressed a panegyrical oration to Constantius Chlorus, A.D. 296, we find the following passage, the time referred to being the earlier part of the same year, when Constantius sailed with an expedition against Alectus:—"Sed enim illâ estate" (alluding to Julius Cæsar's expeditions to this country) "nec Britannia ullis erat ad navale bellum armata navigiis, et Romana res inde jam a Punicis Asiaticisque bellis, etiam recenti exercitata piratico et propiore Mithridatico non magis terrestri quamnavali usu vigebat. Ad hoc natio etiam tunc rudis et solis Britanni Pictis modo et Hibernis assueta hostibus, adhuc seminudi facile Romanis armis signisque cesserunt; prope ut hoc uno Cæsar gloriari in illâ expeditione debuerit quod navigasset oceanum," i.e., "But at that time Britain was not provided with any ships for a naval war, and the Romans were no less prepared for a war by sea than for one by land, from the Punic and Asiatic wars and the recent piratical and Mithridatic wars; and thus this nation, so uncivilized, and only used to Pictish and Irish foes, easily yielded to the Roman arms and standards; so that Cæsar could only in reality boast that he had conquered the ocean." It may, however, be contended in answer to this passage that it is of no weight, being obviously not founded on any historical information as to the state of Britain in Cæsar's time. The Picts had not at that time located themselves in Caledonia, not having emigrated to this country till shortly before the reign of Severus, according to the opinion of the best writers; nor is there authority for the wars of the early British with the Irish. The passage of Eumenius is therefore merely an oratorical flourish.

Another argument that the Britons had no ships may be deduced from the Welsh Triads, which, mentioning the three British leaders who were famous for their fleets, specify not persons who lived in early times—not Cassibelan, Timancius, or Cunobeline—but Geraint, March, and Gwenwynnyn, the two first of which lived in the fifth century; the third also being in no early era. This again is indefinite evidence; for the Triads, written according to some about A.D. 700, do not often, or rather so to say, do not always refer to times more ancient than the Roman conquest; and if no use is made of the apocryphal testimony of the British chronicles in favour that Brennus, a British king, about B.C. 400, fitted out a fleet, and that Gurguntius, another British king, about B.C. 375, fitted out a naval armament against Denmark to enforce tribute, and that Cassibelan, in the time of Cæsar, had a fleet, so ought not adverse inferences from the Triads to be admitted.

On the other hand, as to the arguments for our purpose, *i.e.*, that the ancient Britons had ships, there seems a higher degree of probability attached.

In the first place, it is most generally believed that the Phœnicians and Greeks traded to the island with their shipping; at any rate, it is certain from Strabo that there was a great resort of shipping hither in his time from Gaulish ports. It is therefore extremely probable that in length of time, from imitation, the Britons themselves may have attempted the construction of ships. If they did not, they must have been inferior in capacity to other nations under the same circumstances, which we have no reason to suppose.

Again, in Cæsar's Commentaries the Veneti, in their war against the Romans, are described as almost solely assisted by the maritime states of Gaul and by the Britons. (*Gaulish Wars*, book iii. 9.) The Osismii, Lexovii, Nannetes, Ambiliati, Morini, Diablantes, and Menapii of Gaul, as well as the Britons, came to their assistance. As the above states of Gaul, with the exception of the Diablantes, who were their near neighbours by land to the north-east, were all maritime states, it is almost unquestionable that as well as with men they assisted their countrymen the Veneti with ships, contributing to form that powerful armament which offered so great an opposition to the Roman admiral Publius Crassus. And as the Veneti received assistance from Britain, it is most reasonable to suppose that the same assistance was rendered not with men only but with ships. The presumption is here in our favour, and this is a fact that we may almost, though not with entire certainty, assume.

Those who are inclined to assume the affirmative will bear in mind that the ships of the Veneti were of some considerable size, as is shown in the note below, for they are described by Cæsar as over-topping with their towers the Roman ships, to which superiority of size the great difficulty of the Romans in defeating the fleet of the Veneti is ascribed (book iii. 13*). If this passage therefore proves the Britons had ships, as many think, it appears to show that those ships must have been sea-going ships and of large dimensions for ancient times.

As, however, it so happens that we are not entirely able to obviate counter statements and objections on this subject, so we have rather as qualifications to the above that Cæsar, a year or two after the said naval war with the Veneti, when he intends to invade Britain, arms a single galley to explore the British coast to ascertain the best place for landing (book iv. 21). This vessel Volusenus commands, and it is out five days, and nothing is said of its meeting any British ships at

* *I.e.*, admitting the Roman galleys to have been about 25 or 30 tons burden, and their war vessels of greater size, 60 or 70. Therefore the ships of the Veneti, having towers higher than the Roman ships, to have been safe as sea-going ships which they were, must have been at the least of about the burden of 150 tons.

sea, or apprehending to do so ; though indeed hostilities do not appear at this time to have commenced, yet in the doubtful posture of affairs, had the Britons possessed a naval force, it is hardly probable Cæsar would have sent a single vessel only on the mission.

Again, it is suggested in vol. ii. of the *Archæologia Cambrensis*, a work of learning and research, that the Guenethi, or inhabitants of North Wales, formerly called Venedotia, the Ordovices in fact, were from similarity of name of the same origin with the Veneti before-mentioned ; that a friendly commerce existed between these two branches of the same stock, and that it was the British Guenethi who assisted their brethren the Veneti of the continent in their naval war. This suggestion, would it hold good, might make it appear probable that this one part of Britain possessed shipping and the rest of the island none, and thus might be a species of compromise of the present question. The due degree of proof, however, seems wanting of the fact of the intercourse between the Veneti of Gaul and the Guenethi of Britain, and of the capabilities of the latter of fitting out naval armaments. The only presumption in favour is, that being the supposed colony of a maritime state, they might possibly have been more advanced in the art of navigation than the other Britons. Against this we may place that the southern and south-eastern ports of Britain might seem *primâ facie* to have been more in the thoroughfares of the commerce of Europe than those of the Guenethi.

We now come to the passage in Boadicea's speech, as in Xiphilinus, which first gave occasion to these remarks. The words of this passage before referred to are :—“ We ourselves have been the cause of all these evils; who, when they (the Romans) were yet afar off, did not make the navigation hither too formidable to be attempted, as we did to Augustus, and to Caius, called Caligula.” Here the meaning appears so plain, that in the edition of Xiphilinus by Guglielmo Blanck, 8vo., 1551, which was one of the earliest published, p. 152, he translates the concluding part of the passage thus :—“ Qui non contra eos quum adhuc longe abessent ut contra Augustum et Caligulam magnâ et metuendâ classe contendimus :” thinking, it is evident, that he best rendered the sense of his author by introducing the words “with a great and formidable fleet” into his Latin translation. The passage should have stood in book lxii. of Dion Cassius ; but much of that author's work being lost, including this part, we have it in Xiphilinus, his abbreviator. It has then Dion Cassius's authority : and we have the evidence of that historian, given indeed as part of a speech, which it must be allowed somewhat weakens the direct testimony which would have otherwise been afforded by the words used.

Are we then warranted by history to repute that the Britons persisted ever in the use of their small vessels, formed of wicker-work, and covered with hides, and made no attempts to imitate the con-

struction of ships of more substantial materials, either of the Phoenicians, Greeks, Gauls, or Romans, or do we consider that they did ?

On the whole the most credible supposition seems to be that the assertions of Dion and Xiphilinus are correct, that the ancient Britons had not only ships, but on occasion fitted out powerful fleets. Their ingenuity in constructing smaller vessels of wicker-work is, in fact, not really an argument to the contrary, but rather otherwise ; though from the loss or mutilation of so much of ancient history their naval efforts are not recorded. It may easily have been that the Romans on their conquest prohibited the Britons from shipbuilding, desirous in so distant a province to keep the whole naval power in their own hands. Thus, the Britons ceasing to build ships under the Romans, and being chiefly known for their wicker-work vessels, the idea may have originated that they never had any other.

According to Propertius, the Britons had not only a fleet fitted out for their defence, but matters actually proceeded to several naval contests. In his *Elegies*, ii. 27, he has this passage :

“Seu pedibus Parthos sequimur, seu classe Britannos ;”

i.e. “Whether we pursue the Parthians on land, or the Britons with our fleet.”

This is the passage before spoken of as considered to afford a striking corroboration of Xiphilinus ; for as Propertius was contemporary with the British king Timancius, the father of Cunobeline, between whom and Augustus there were misunderstandings for nearly twenty years, as we may gather from Dion Cassius and Horace, this passage applies to the very time when it may be inferred from Xiphilinus that the Britons possessed naval forces : and therefore is attended with the greater probability.

It is true the speech as in Xiphilinus from Dion may not be considered so much as expressing the very words of Boadicea as introduced as a species of ornament of composition, in imitation of a passage in the sixth book, c. 34, of Thucydides. In the place in question the Syracusans are represented as addressed by one of their leaders, who expostulates with them, and incites them to fit out a fleet in the endeavour to cut off the Athenians on their passage. This, however, seems a confirmation rather than otherwise, as no one will assert that the Syracusans might not have so acted, and fitted out a naval force. The like capability must, therefore, be conceded to the ancient Britons.

If it be conceded that the Britons possessed ships, it may only be deemed congruous to the advance they had made in coinage ; though it is true no representation of a ship, or aught approaching to it, appears on any of the coins of Cunobeline, or those of other British princes. It would also be congruous with what Strabo mentions respecting the

custom-house duties (*portoria*) paid in Gaulish ports on goods exported and imported to and from Britain, which amounted to an equal sum to the Roman tribute. It is improbable that some of these goods should not have been conveyed in British ships. Can it be believed that there were no merchants in Britain, or that, if there were, these possessed no ships in a country abounding with every material for their construction? The silence of ancient authors may not therefore be taken as a conclusive negative argument in this case.

Yours, etc. B. POSTE.

Ancient Boats and Canoes.

[1826, *Part II.*, pp. 99, 100.]

A few weeks since, as some workmen were employed in digging a well at the residence of Gregory Doyle, Esq., in St. James's parish, Shaftesbury, they discovered in a bed of sand, after cutting through a stratum of solid rock nearly eight feet thick, an instrument resembling a paddle, made of British oak, of the rudest workmanship, and in the best state of preservation, with this exception, that it had a covering of a spongy nature. It is three feet five inches long, and is now in the possession of the Recorder, Charles Bowles, Esq.

Yours, etc. T. ADAMS.

Mr. Gregory Doyle, on whose premises this curious instrument was discovered, has thus certified the circumstances of the discovery :

"In sinking a well in the yard, at the back of my house in St. James's Street, the instrument here represented [a wood block is here given] was discovered. It is three feet five inches long.

"After going through four feet of the Town grit, or chert, seven feet of the solid green sandstone-rock, and nine feet of loose green sand under the rock, Henry Patfield, the well-digger, in my presence, on July 15, 1826, perceived the handle or small end of the instrument protruding itself into the well about ten inches, lying in a position considerably inclined, perhaps at fifty degrees, the broad part being lowest, and pointing in a direction towards the base of the rock, on which the tower of St. Peter's Church stands about 100 feet above.

"When drawn out, the instrument, which is of sound oak, was apparently in a state of external decay, which being perhaps unfortunately washed to the depth of about $\frac{1}{4}$ inch all round, it remained with a solid surface.

"GREGORY DOYLE."

The following remarks have been communicated by Mr. Rutter, bookseller, Shaftesbury :

"Mr. Doyle's house is south-west of the hill, 100 feet below its summit. The springs on that side have all a south-west course, the

surface of the earth declining in that direction. The nearest well to Mr. Doyle's is the Abbey Well, sunk from the summit of the hill to the depth of 120 feet, at 200 yards to the west. A shallow well, ten feet deep, and on a level with Mr. Doyle's, was dug about 50 years since, and in a north-west direction. The depth of the springs is 120 feet from the summit of the hill, and on the level of Mr. Doyle's it is 16 feet, in some places 20 feet, below the surface. The shallow well mentioned above is not likely to be connected with Mr. Doyle's, being supplied by land-springs from the hill above the rock."

Another correspondent, the Rev. Wm. Meyrick, observes :

"The only possible mode in which the paddle could have got thither, must have been by the current of some spring, having been left in some other well, perhaps that of the Abbey, and that channel afterwards choked up by sand ; at least this is my own explanation, and to myself satisfactory. In any point of view it is very singular, and the paddle itself of great antiquity, for it is formed either with a celt, or as if with a coarse knife, though I conceive it to have preceded the use of iron, and therefore cut with a celt. It is clearly of oak, and the decayed surface was no way scraped, but only washed off with the sharp sand upon it ; and let me add, that Mr. Doyle's statement is far above all suspicion, and that there was no possibility of any imposition by the digger, as, the well being close to the door, Mr. Doyle was anxiously watching the finding water, saw himself the end of the handle before Patfield noticed it, and saw him take it out of the unmoved and solid bed of sand, then three feet deep."

[1834, *Part I.*, pp. 94, 95.]

A few weeks ago, some workmen employed in deepening a ditch on the land of Odiarne Coates, Esq., at the Warren, near New Romney, dug some timbers, about 18 inches below the old bottom ; and on clearing away the soil in which it was embedded, they discovered that what had for thirty years been deemed to be old piling was in fact the timber-head of a vessel, 24 feet in width and 52 feet in length, and having a depth of 8 feet in the hold, built chiefly of oak timber, with some elm and fir, clinker built, and trunnelled. It is supposed to have been a sloop, as the step of the mast was remaining. Many of the timbers were found firm and solid when cut with a saw ; and some pieces of rope, retaining the smell of tar, were also found. Some skulls of horned animals of the goat kind, bones, it is said, of men as well as animals, and some copper coins, were found on board. The situation of the vessel is full six furlongs from the sea, and at the back of the Warren House. It is recorded that in 1250 the towns of Winchelsea and Romney were nearly destroyed by a hurricane ; of which the following account is given in Holinshed upon the authority of Matthew Paris : "The first day of October, the

moon upon her change appearing exceeding red and swelled, began to show tokens of the great tempest of wind which followed, which was so huge and mightie, both by land and sea, that the like hath not been lightly known, and seldom or rather never heard of by men then alive. The sea, forced contrary to her natural course, flowed twice without ebbing, yielding such a roaring noise that the same was heard a far distance from the shore. Moreover, the same sea appeared in the dark of the night to burn, as it had been on fire, and the waves to strive and fight together after a marvellous sort, so that the mariners could not devise how to save their ships where they lay at anchor, by no cunning nor shift which they could devise. At Hurtburne three tall ships perished without being recovered, besides other smaller vessels. At Winchilsea, besides other hurt that was done in bridges, mills, breaks, and banks, there were three hundred houses and some churches drowned with the high rising of the watercourse." It must have been this, or some storm of similar violence, which buried the vessel now discovered.

It is remarkable that the sewer in which she was embedded still retains the name of the Haven.

[1834, *Part I.*, p. 638.]

An ancient boat has been lately discovered in deepening a sewer ditch at North Stoke, a village near the Arun in Sussex. It is formed out of a single oak tree, like the Indian canoes, and is believed to be what was called by the ancient Britons, a cwch. It is in good preservation, measures 34 feet 6 inches in length, 4 feet 6 inches wide in the centre, and is 2 feet high. It has three divisions, which appear to have served the double purpose of seats and supports to the sides. The oak is become as black as ebony.

[1841, *Part II.*, p. 190.]

An ancient canoe was lately found in Haddenham Fen, Isle of Ely, by some men digging gault, 5 feet below the surface. It was lying bottom upwards, and is in length 26 feet, and in breadth something above 4 feet, with rullocks for three pair of oars; about 5 feet in length was broken off the canoe in getting it out. It appeared on close inspection to be hollowed out from the trunk of a single tree, like that found in 1834, near the river Arun in Sussex, now placed in the courtyard of the British Museum, and engraved in the 26th volume of the *Archæologia*. That canoe is 35 feet long.

[1843, *Part I.*, p. 522.]

In January last, as two labouring men were casting about on the beach at the west end of Worthing, for something to engage their attention, at last they were recommended by way of employment to go and dig up a plank, which was seen protruding through the sands 120,

yards from the shore at Heene. Acting upon the suggestion, they proceeded to the spot and set to work. By degrees, as they removed the sand, the object of their labour was found to extend some distance downwards, and to present a shape which indicated that it was not a mere plank, as they at first thought. At length they drew out an ancient boat of considerable length, formed out of an oak tree. It has ridges across the floor to give it strength, and is square at both ends; it has no keel, and is sloped away under the ends to the bottom. Around the sides some pieces of wood were pegged on, and in one place in the side a small piece of sliding wood was fitted in. The soil in which it was imbedded was one of black mud, and has imparted its own colour to the boat, which yields to the pressure of the finger. In 1834 a similar boat was dug up at North Stoke. It is said that at various times, for twenty or thirty years past, the upper end of the boat had been seen above the sands, and that it was always supposed to have been the stump of an old groyne pile. The lower end was five feet beneath the surface. It was bought by Mr. Tuff, of the Spaniard Inn.

[1829, *Part II.*, p. 267.]

The workmen employed in excavating a foundation in St. John Street, Perth, lately discovered the remains of a boat at a depth of about 10 feet below the surface of the ground. The prow was pretty entire; the planks and bindings were of oak, and the former were not only fastened with copper rivets, but, unlike those of modern construction, were rabbed upon one another. A well-formed rope of exceedingly fine heather was attached to the vessel, and extended a considerable way in the earth from where it lay. Under and about the boat distinct vestiges of willows, and other aquatic shrubs and plants, were discovered, and, indeed, all the appearances afford proof that the vessel is of great antiquity, and must have been deposited there many centuries ago.

[1825, *Part II.*, pp. 167, 168.]

In making the common sewer, in London Street, Glasgow, from the part near the Cross, which is finished, down to the Molendinar Burn, there was found, some time ago, at the depth of about 10 feet, the remains of a boat lying in a bed of blue clay, which was covered and surrounded by fine sand, like that found on the shores of a navigable river or wide frith. Some of the nails which were used as fastenings were in the wood, which was fine oak, and become quite black from its long immersion under the earth. The calking used for the boat appeared to have been wool dipped in tar. It is a curious fact that, some years ago, when the common sewer was cutting in the Stockwell, a boat of a similar description was found a little above Jackson Street; which would indicate that these two places where

the boats have been found were then the line of the shore of the frith, or bed of the river. These boats must have lain in the places where found many centuries. It is not probable they belonged to, or were constructed by, the aborigines of the country. The workmanship would indicate that they were formed by a people considerably advanced in civilization. It is probable they were constructed by the Romans, about the period of Agricola's expedition into Caledonia, about 1,740 years ago; at which period, there seems little reason to doubt, the greater part of the ground on which Glasgow now stands, and all the low lands on both banks of the river, to a considerable distance, were covered by the water of the Clyde.

[1848, *Part II.*, p. 637.]

On the 2nd November workmen employed in forming a new quay on the south side of the Clyde at Glasgow, about 300 feet from the margin of the present channel of the river, came upon a canoe embedded in fine sand, at least 20 feet from the surface. The boat, when measured, was found to be 19 feet in length, by 2½ feet deep, and 2½ feet wide. It has a sharp prow and square stern, and has been cut out of the solid oak. From the length and other appearances it would seem to be adapted for six oars. The wood is in pretty good preservation, but part of it was broken by the workmen in digging it out. It is the intention of Mr. Brownlie, the contractor, to have the piece that has been broken off preserved, along with the rest of the ancient structure.

[1834, *Part I.*, p. 95.]

Another ancient vessel has been found in the Loch of Spynie, near Elgin, by Mr. Dean, farmer, of Easter Oakenhead, while engaged in ploughing land, situate on the eastern extremity of the loch, which had been reclaimed since the draining of the loch. Its length appears to have been 30 feet, the whole of the ribs are entire, composed of oak, and the stern is quite round. When the excavators came to that part of the vessel which must have been the deck, although distinguishable enough, yet the spade went through it as if it had only been clay. The whole of the space betwixt the ribs and the outer and inner covering, of which we could find no more traces than we did of the deck, had been closely filled up with heather, which appeared before touching it quite fresh, but immediately after became a pulp. It is thought probable that this vessel has been lost nearly six hundred years, as one of its dimensions could not have navigated the loch, particularly the part where it has been found, after the twelfth or thirteenth century.

[1850, *Part I.*, p. 197.]

A short time ago some workmen, engaged in making a drain on

the farm of Knaven, on the estate of Nethermuir, County Aberdeen, discovered a boat, evidently of great antiquity, quite entire, and still in high preservation. It was found at a depth of 5 feet from the surface, in a deposit of moss, at the head of a small ravine. It is formed out of a solid oak-tree, and is 11 feet long, and nearly 4 broad, having at the stern a projecting part, with an eye in it for the purpose of mooring. It is of a very rude manufacture, and the mark of the hatchet, or instrument by which it was constructed, is still visible. The farm of Knaven is several miles from the river Ythan, and many from the sea, and it is difficult to conjecture what use the boat had been intended for, unless, indeed, there had been an accumulation of water below, and of which the ravine was the head, and it might have been employed for crossing the swamp. Near this ancient boat were found the stumps and roots of several very large oaks. An eminent shipbuilder on the Clyde is of opinion that there is hardly now growing in Scotland an oak-tree of sufficient size to produce a boat of these dimensions. With the exception of the thriving young plantations near the house of Nethermuir, nothing but oat-plant or the turnip is now to be seen in this quarter. The curious relic has been placed under water (for the purpose of preserving it) at Nethermuir.

[1821, *Part II.*, pp. 454, 455.]

The *Newry Telegraph* says: "About two months ago, two oak canoes, each 21 feet in length, and excavated from the tree, were found in Loughisland Ravey, near Castlewellan. The right side of the one, and the left side of the other, were convex in form ; the opposite sides were perfectly straight, so as that the two could have been occasionally joined together. Some curious implements of war were found in the bottoms of these canoes. The timber of these antique vessels was perfectly sound, and the whole in a high state of preservation. Unfortunately the finders, who had little respect for antiquity, have burned part of the canoes, and made furniture of the remainder."

[1839, *Part I.*, p. 196.]

A short time ago, when the water was drawn off Lough Reavy, for the purpose of deepening the part nearest the discharge pipes, three old canoes, each apparently hollowed out of a single tree, were discovered embedded in the mud. One has been conveyed to Lord Downshire's seat at Hillsborough ; another to Castle Ward, the seat of the Bangor family ; and the third is in the possession of the Earl of Roden, at Tullymore.

[1841, *Part II.*, p. 639.]

Some men engaged in digging stones in a bog on the lands of Upper Ballylaneen, County Waterford, the estate of Sir Charles Kennedy,

Bart., lately discovered a kind of canoe, of rude workmanship. It was hewn out of the trunk of a large oak-tree, sufficiently large to bear up three persons, being eight and a half feet in length, and two feet ten inches in breadth, and round on the bottom. It is astonishingly perfect, considering the situation it was placed in, being embedded in turf mould, and surrounded by large stones. It is at present in the possession of Mr. David Power, the farmer who holds the lands on which it was discovered.

Stone and Flint Implements.

[1833, Part I., pp. 204, 205.]

. . . . Some writers inform us that the bow and arrow were unknown in Britain at the time of the Norman Conquest (so scanty is authentic information on the subject); others date its introduction to the time of the Saxons; while a few modern writers on Archery suppose these weapons were first used in Britain at the Roman invasion, 55 years B.C. Certain it is, that prior to that period no mention whatever is made of the bow in this island; indeed Caesar, Strabo, Cornelius Tacitus, and many other writers, who have been very minute in describing the manners and customs of the ancient Britons, make no mention of the bow whatever; but describe them as fighting principally in chariots having scythes attached to the axle-tree, and also making use of darts to annoy the enemy. Probably their bows were of an inferior description, and not used by them in battle, or some of the early writers would certainly have made mention of them (for we are furnished with numerous accounts of their being in use on the Continent at a much earlier date). Be that as it may, I trust the silence of history on any subject does not deny a fact that may in after-ages be clearly proved; and in my humble opinion, those flint arrow-heads furnish us with indisputable evidence that Archery was known in these islands very many centuries before the invasion.

Stone arrow-heads have been and are occasionally found in every quarter of the globe. They are generally very similar in shape, although differing in size and material; I have now before me four of them which have been found in the British Islands. The largest specimen is an inch and half in length, and weighs five pennyweights; it is perfectly white in colour, and semi-transparent, like an agate, and corresponds with Mr. Moseley's description of those found in Ireland, of which he says "some are almost as pellucid as an onyx." The second in size is made of the common brown flint, and exactly resembles the engraving given in your January number [1833, Part I., p. 13]. The third is of a motley coloured flint, rather more rounded at the point, and very similar to a drawing of one given in Allanson's "Illustrations of Arms, etc., at Goodrich Court," plate 46. The smallest one is only seven-eighths of an inch in length, and weighs but

thirteen grains ; it is composed of a reddish-coloured flint, and is similar to specimens found in some parts of Scotland. Moseley says, "There are some in Perthshire red, which appear to have been the heads of very small arrows."^{*}

Stone arrow-heads are sometimes improperly called Elf-stones, a name given to them by the superstitious inhabitants of the Middle Ages, from their not being able to account for them in any other way, but by supposing them to have been shot by fairies. . . .

GEO. MILNER, JUNR.

[1833, Part I., p. 304.]

In corroboration of the inferences of your valuable correspondent Mr. Milner, of Kingston-upon-Hull, I beg leave to observe that the *Bwa*, or bow, was an ancient Celtic weapon known in Britain long before the Roman *Arcus* had made its appearance, and that Herodotus mentions Abaris (Ab-Aris, the son of Aris), the priest of the Hyperboreans, by some supposed the inhabitants of this island, to have carried a *reed* arrow with him. The Triads celebrate Gwrneth, the sharp-shooter, as shooting with *reed* arrows ; and we may judge of the estimation in which archery was once held from the very ancient adage, "Nid hyder ond Bwa," "There is no reliance but on the bow." It is true that Gwrneth, and perhaps Abaris, may be mythological personages ; but *reed* arrows would not have been assigned them had that material not been in general use in Britain. These were headed with bones sharpened to an acute edge,† or flints ground down to a proper shape, such as mentioned by Mr. Milner. . . . I have only met with one *bronze* arrow-head that I feel warranted in pronouncing ancient British. This was found in a cist-væn in the grounds belonging to Whitfield, about seven miles south-west of Hereford, and is in the possession of the Rev. Arthur Clive. . . .

SAMUEL R. MEYRICK.

[1789, Part II., p. 799.]

. . . It appears from Exodus iv. 25, that the Midianites used a sharp stone instead of a knife in the time of Moses. Stones and clubs were undoubtedly the first offensive weapons ; and it is positively asserted by Pliny, that the latter were used by the Libyans in an ancient war which this people had with the Egyptians. An author, whose name at present I cannot recollect, informs us, that the maritime nations of Italy formerly pointed their darts with the bony termination of the tail of the fireflair. Tacitus says, that the Germans, in his time, headed their spears very sparingly with iron, which they obtained by barter from the Gauls and Italians ; but that the Fenni, a very extensive tribe, but ruder than the rest, without cattle, and without habitations,

* Engravings of three varieties of stone arrow-heads may be seen in Moseley's *Essay on Archery*, page 115.

† See *Archaeol.*, vol. xv., p. 3.

depended on their bows for subsistence ; and it would be folly to suppose that a people, thus destitute of arts and commerce, could procure any other tips for their arrows than those of the simplest kind.

There is not, as far as I know, any historic evidence proving that these primitive instruments were ever used by the ancient Britons. Julius Cæsar, who describes their manners, found them possessed of copper and iron, though sufficiently barbarous in other respects ; the former they obtained by commerce, and the latter was extracted from the ore by the inhabitants of the coast, who, being of Gallic extraction, were acquainted with the arts of the Continent. By this early intercourse between our ancestors and their more cultivated neighbours, the Romans were prevented from observing those sequestered islanders in their native simplicity ; they had surmounted the more destitute condition of savage life previous to the first visit of their conquerors ; and before the commencement of their history they were become too sensible of the superior advantages of metals, to depend on implements made of more imperfect materials. But the researches of the antiquary have supplied the defects of written records, flints are found in different parts of Scotland, which have been fashioned with great labour into the heads of arrows. The stone from which these views are given (pl. 11. figs. 6, 7, 8) is of the same date, and from the same hands. It was found in a rivulet in the North of Cumberland. The peculiarity of its form renders it impossible to determine its precise use. It has evidently been intended for an offensive weapon, and its employer, in all probability, either tied it to the end of a thong, or fixed it in a wicker handle.

D. G.

[1790, Part II., pp. 799, 800.]

Perhaps the following description of the stone will not be thought superfluous, in addition to the plate. The central part of it is, in figure, an imperfect oval ; its two greatest diameters are $2\frac{1}{2}$ and $1\frac{3}{4}$ inches. It projects both ways, in respect to the thinner parts of the stone, and the two prominences are neither equal in height nor similar in form ; the greater is terminated by an oval plane, which is $1\frac{3}{4}$ by $1\frac{1}{4}$ inches ; the less is bounded by a surface somewhat convex, and both parts are marked with rings parallel to their common base ; those of the former are oval, but those of the latter nearly circular ; the two projections uniting in their common base form an acute angle, which inclines a little towards the higher side ; and the whole is something more than $1\frac{1}{2}$ inches in thickness. The two thinner parts of the stone, which may be called the blades of the instrument, are alike in size and figure, projecting about an inch from the longer sides of the central part to which they are fixed ; their ends appear to be arches of circles, and their diameters contract a little where they join the prominent part, forming two depressions on each blade ; they are convex on both sides, but more so on one side than the other, and the angle which con-

stitutes their edges resembles that mentioned above, surrounding the central part. . . .

It does not strike fire with steel ; its weight in air is 6 oz. 18 dwts. 13 gr. ; in water, 4 oz. 5 dwts. 8 gr. ; therefore its specific gravity is expressed by 2⁶⁰⁴. . . .

Being no antiquary myself, and supposing the curiosity worthy the attention of persons of this description, I have deposited it in the public museum of Mr. Crosthwaite, of Keswick, for the inspection of such as may have an opportunity and inclination to examine it.

D. G.

[1783, *Part I.*, pp. 393, 394.]

I cannot with any propriety send you a sketch of a very singular instrument lately discovered here (*See Plate, fig. 2.*), without adding a few words of description and illustration, though in speaking of it in the latter respect I cannot be very particular, but am obliged to keep to generals.

The weapon—for I am of opinion we ought to call it by that name—was found, July, 1778, in a field at Brimington, County Derby, as the labourers were opening a stone quarry for the use of the turnpike-road then making between Brimington and Whittington, and was given to me by a friend. It was lodged in a bed of yellow clay, and is judged to be ironstone. However, it was found exactly in this form, having had no tool upon it since, except that the clay adhering to it was scraped off with a knife.

It is 22 inches long, including the handle, 2 inches broad in the broadest part, which is that next the handle, 1 inch broad at the end, and $\frac{3}{4}$ inch thick, though in that not quite uniform. It is whitish, of a close texture, smooth, and ponderous ; and when held by the handle would give a most deadly blow, and yet I think would be very liable to break, and therefore would not be comparable to the iron maces used in later times ; I say, *in later times*, because I esteem it a fighting club of the Britons, for, having neither edge nor point, it was apparently made for striking.

When brass and iron were scarce in this island, it was natural for the inhabitants to apply stone to those purposes for which we now use metals. Hence we hear of arrow-heads of stone, axes, hammers, knives, etc. ; and indeed several of these appear in our museums. But it seems absurd to think an entire weapon, shaft and point, should consist of stone ; and consequently, when Wormius speaks of a stone-spear, *hasta lapidea*,* we must understand him of the cuspis only ; and yet I know not whether the whole short arrow, for so the author calls it, found lodged in the blubber of a fish, was not entirely made of stone. However, his words concerning the *hasta*

* If this great antiquary and naturalist had meant a spear's head only, as some may think, he would surely have termed it *Haste Cuspis*, vel *spiculum*.

lapidea are these: "Non ita pridem in dioecesi Ripensi, una cum urnis effossa est *hasta lapidea* ex silice affabré elaborata, quam naturæ an artis esset opus dubitarunt quotquot eam apud me viderunt."* There was dug up not long since in the diocese of Ripon, along with some urns, a *stone-spear*, exquisitely formed of flint; and those who saw it in my museum could not resolve whether it was the work of nature or of art.

Certainly, Mr. Urban, it is very uncommon to meet with warlike instruments of such a length as our mace, composed of stone; but I make no doubt but both the one and the other were the work of art, though some of Wormius's visitors were, it seems, in doubt as to this. That the club, or mace, in the ruder ages of the world was applied in warlike frays and engagements, we have all the reason in the world to imagine; though it must be acknowledged it was made of very various materials. Hence the club of Hercules, the malleus of Thor, and the opinion of Horace, who, speaking of the first race of men, says:

"—— glandem atque cubilia propter
Unguibus et pugnis, dein *fustibus*, atque ita porro
Pugnabant armis."†

The mace was used in war by many nations, Libyans, Egyptians, Ethiopians, Greeks, Assyrians, Germans, and Gauls.‡ This, however, is the only one, so far as has occurred to me, ever found in this island, especially as made of stone. T. Row.

[1784, Part I., p. 15.]

The stone instruments in the Plate, *figs. 2 and 3*, were found, March 25, 1783, between 2 and 3 feet under the surface of a malm bank, a few feet distant from each other, by some labourers employed in levelling a piece of marsh land called Sickmarsh, at Boffington, near Stockbridge, Hants, belonging to Thomas South, Esquire. Within a few feet of these, and nearly on the same depth, they found a sort of hearth or pavement of flints and stones, apparently much discoloured, cracked, and broken by the heat of fire, on or near the spot where the antique pig of lead exhibited in your Magazine for November last was dug. The letters on the lead are as perfect as when they came out of the mould; and the marks on the stone blades prove that they were made in the rough state by chipping them, or by nicking them with other flints, till brought nearly to their intended shape, and then polished probably in the same manner that we now polish marble in sands of different degrees of fineness.

* Wormii Mon. Dan., p. 47. See also his Museum, p. 350.

† Horat. i Serm. III. 100. The North Carolinians use now a fighting club. Thoresby, p. 472.

‡ Sir Isaac Newton, Chronol., pp. 215, 227. Montf. Antiq., IV. pp. 18, 20, 45.

From a survey of the premises, and the situation of the place midway between the wood and the river, joined to the above circumstance of the hearth, it is not unreasonable to conclude that the ancient Britons, who were as unacquainted with iron as the savages of Otaheite, made use of flints and stones instead of it, for the purposes of hollowing their boats and canoes, and for other uses. It is probable they first hollowed the trunks of trees by fire; a quantity of hot embers being taken from the burning hearth, and laid in a train along the shaft of the timber-stick. The coarse flint axe was sufficient for the purpose of chipping and paring away the burnt part, and finishing the groove or channel, which being filled with a second supply of embers, the fire sank deeper by degrees, and the coal was again chopped out, till by repeated process the requisite depth was attained for the vessel. Being thus rendered lighter and more manageable, it was then perhaps lifted on rollers, and propped with its ends one after the other over the flame, till cooled on the outside, and then with the same instruments shaped and finished according to the rude ideas of the times.

In this manner the Indians of Florida and Brazil are represented as hollowing their canoes by our early voyagers.

These flint blades, compared with those of stone lately imported from the new-discovered islands in the South Seas, clearly prove that, in the infancy of arts, the necessities of war drove them to like inventions in all countries, however remote from each other.

These being the only instruments of the kind I have seen or heard of, of British manufacture, I thought them deserving your attention.

T. S.

[1797, Part I., pp. 199, 200.]

There is a paper in the first and only volume yet published of the Transactions of the Antiquaries of Scotland, by Mr. Little, on the expedients used by the Celts in this country previous to the use of metals. His dissertation is accompanied by a plate; but the great defect of both is, that no scale is given, nor information imparted, as to the proportional sizes of the different stone utensils and weapons exhibited and described. I have seen many, and possess a few, of the small ancient darts, or arrow-heads, composed of pebble or flint, in various forms, but chiefly triangular, and barbed with wings, or approaching to the shape of the geometrical figure termed a rhomboid. But none of these ever exceeded 2 inches, or $2\frac{1}{2}$ inches, in length. Such are called *elf-arrows* by the country people who find them.

I enclose you an exact drawing (Plate II.), showing the precise magnitude and form of a very remarkable stone, which was lately communicated to me by John Guthrie, Esquire, of Guthrie, having been found in a cairn on his estate in the central part of this

county (Forfarshire). No. 1 shows its length and breadth,* and No. 2 its length and thickness. It is an uncommonly long flint or pebble, of a dusky straw-colour slightly blended with a light-blue shade, is considerably pellucid, and as hard and susceptible of polish as the finest cornelian. The sharpness of its edges and point, and general regularity of its form, have been attained with surprising perfection, when the remoteness of the era of its probable formation and untoward means employed are considered. When firmly fastened to a shaft, it must have been a very formidable *telum*.

CIVIS.

[1797, Part II., pp. 729, 730.]

I feel a sincere pleasure whenever my researches can produce, or discover, anything new, either in the pursuit of Natural History, or the antiquities of my native kingdom. I now beg to acquaint you of the discovery of a stone celt, found in the parish of Wolfardisworthy (*vulgo* Woolferry), in the county of Devon; and herewith you receive a drawing of the exact size.† It was discovered in the grounds of William Comyns, Esquire, by a labourer who was trenching. The singularity of the appearance of the stone awakened his curiosity, and he had laid it on the bank for future inspection. Fortunately, Mr. Comyns came by, and rescued the antique morsel, otherwise, with probability, it might again have been committed to oblivion at the spade's depth when the curiosity of the labourer had been gratified. The man reported to have met with a quantity of greasy ashes (as he called them) at a small distance from the spot where this was found. This curiosity, I believe, is unique in this county, and in fine preservation; is a yellowish opaque flint, blended in many parts with bluish and whitish-yellow spots and veins. The edges have been chipped with the greatest nicety and care, and scarcely appear except in two places, 1, 2, in this view. The face of the whole is smooth and polished, and ground or rubbed down from the centre A to the edges, towards the broad end, to a very sharp edge. On investigating the form of this curious piece of antiquity, I think it was used for no other purpose but as a knife, by grasping it firm in the hand by the narrow end, and cutting with it at the broad; and, if I may be permitted to derogate from the opinion of men more learned than myself, I must give up the idea of its having ever been used as the head of a warlike *telum*. I speak alone of the stone celts: those celts formed of brass, or other metal, that have come in my way, I have no doubt, were used for some such purpose, as their figure and formation sufficiently evince. Borlase, in his "Antiquities of Cornwall," figures a stone celt found in Cornwall; and, from the chipping of its edges being much indented,

* In our Plate the figures are reduced to exactly *one half* the real size.

† In the engraving (fig. 3) it is exactly two-thirds of the real size.

forms an opinion that the indentations were for the purpose of more firmly binding or fastening it unto the handle or shaft of the spear. On examining his figure, I am of opinion that the roughness was entirely owing to the incapacity of the workman, or the brittleness of the stone, which by the act of chipping splintered too deep, or it might have been purposely done for the more firmly grasping it when in use. That the celt, of which you receive a drawing as above, was ever used as the head of a spear, javelin, or otherwise, is impossible, as no stricture or bandage, however put on, would be adequate to fixing or retaining it; its tapering narrowness being an invincible bar to its keeping and preserving a situation of this nature. I further observe on the stone, from the figures 4 to 4, the extreme sharp edge has been taken down by rasping or grinding to the thickness of 2-8ths of an inch, and rounded off, which appears to me another strong corroborating proof. The weight of this stone is 17 ounces avoirdupois.

Yours, etc. J. LASKEY.

[1805, *Part II.*, p. 696.]

Celts, and other reliques of "elder days," have been lately dug up near Clayton Windmill, on the South Downs, County Sussex, a little to the left of the London road (through Cuckfield) to Brighton.

WILLIAM HAMPER.

[1823, *Part II.*, p. 169.]

A remarkable specimen of a flint celt or battle-axe, both for its beauty and size, was found on the 3rd of May last, on the property of James Nairne, Esquire, of Claremont, near St. Andrews. It lay towards the bottom of a pretty steep bank, 2 feet below the surface. Its substance is of flint, of a grey or dove-colour. Its length 1 foot. Its greatest breadth is 3 inches, at the middle $2\frac{3}{10}$ inches, and its least breadth $1\frac{9}{10}$ inch. Its greatest thickness is $1\frac{3}{10}$ inch; and its weight is about 1 lb. 14 oz. Its larger end is brought to a sharp edge, and the smaller end, though rounded, is considerably more blunt.*

[1829, *Part II.*, p. 455.]

As workmen were making alterations in the house lately occupied by Mr. Alderman Hearn, in High Ousegate, York, they found an implement of polished bone, in form somewhat resembling a spear or arrow-head, about 3 inches in length; and also two other polished bones, about 8 inches long, made into the form of a skate, and turned up at the end. At the thicker end of these bones is a hole perforated, and the end is formed as if to receive a cord or wire to attach it to some other apparatus. In digging for the foundation of the new houses erected in Davygate, on the ancient site of Davy Hall, several pins were found which were made of polished bone, together with other implements.

* It is described and figured in the *Edinburgh Philosophical Journal*, No. XVII.

[1862, *Part I.*, p. 335.]

The workmen recently employed in erecting the telegraph wires by the sides of the Malton and Driffield Railway, which crosses the Yorkshire Wolds, in making the post-holes, found several articles of flint, which from their descriptions are presumed to be weapons, probably arrow-heads. These implements having no value in the estimation of the workmen, have been nearly all re-interred, but local antiquaries are now interesting themselves in the preservation of anything of the kind that may in future be met with. The Wold district has many ancient intrenchments and other evidences of early occupation, of which particulars have heretofore been given in our pages.*

[1863, *Part I.*, p. 358.]

I beg to send you a sketch of a flint arrow-head, drawn by Major Thompson, which has recently been ploughed up in Northumberland. The short account of it was added by the same gentleman: the original is in the possession of William Gray, Esq. I am informed that this is the first time that such an arrow-head has been discovered in Northumberland, although in many districts of England the sort is not uncommon.

I am, etc. JOHN HOGG.

The side represented by Fig. 1 is more smoothly and perfectly finished than the other side, Fig. 2; the drawings are the actual size. It was found on newly ploughed moorland on the left bank of the river Alyn (Northumberland), on the estate of William Gray, Esq., of East Bolton.

[1863, *Part I.*, p. 402.]

In your March number is a letter from Mr. Hogg, of Norton, in which he gives an account and a drawing of a flint arrow-head found at East Bolton, near Alnwick. He mentions also that he has been informed that it is the first time such an arrow-head has been found in Northumberland. In this he has been misinformed; many such have occurred from time to time. I have in my own possession three, similarly shaped, found at Hauxley, and one found near Kyloe. In Raine's "North Durham," p. 218, one is figured, found on Ancroft Moor; and I know of two found near Copeland Castle, another near Norham, and I have seen others found in Northumberland, but my memory does not serve me to name the localities.

I am, etc. W. GREENWELL.

[1863, *Part II.*, pp. 80, 81.]

I have now in my possession a stone which was dug out of a Celtic enclosure in the vicinity of Castleton, and close to the tumulus known

* See especially a paper on "Traces of our Remote Ancestors," *Gentleman's Magazine*, May, 1861, p. 498, *et seq.* [See note 6.]

from time immemorial by the name of Gallow-Houe.* When this stone was found there was another with it, which was such as at once to suggest the purpose for which the two were intended.

The one I have is a block of an extremely hard sandstone, called Crowstone by Professor Phillips, and White Flint in this moorland district, in which only, as far as I am aware, it is known to occur. The dimensions of the block are 21 inches by $11\frac{1}{2}$ inches, and $5\frac{3}{4}$ inches thick, and the whole upper surface is hollowed out to the depth of nearly $1\frac{1}{2}$ inch in the middle, with an even curve from end to end and side to side. The other stone, which was found with it, but has since been, as I fear, irretrievably lost, was a rubber or muller, formed of the same material, in shape and size something like a mason's "mell" of medium dimensions, with a handle, all of a piece with the rest, admitting the grasp of both hands. It seems scarcely possible to doubt that these stones must have been used for the purpose of pounding or bruising either roots or corn. Indeed, the form of the trough is such as to remind a person conversant with north country usages and utensils belonging to an age now rapidly passing away, of the means adopted for "creeing," or husking, the wheat intended to be used in making furments.

I do not remember any notice of any similar antiquity, nor any means, consequently, of ascertaining if they were in use before, or contemporaneously with, the quern.

I am, etc. J. C. ATKINSON.

A Celtic Flint-Implement Factory.

[1863, *Part I.*, pp. 490, 491.]

On Wednesday, February 18th, I was crossing a part of the Danby North Moors, not more than two or three hundred yards distant from "Siss Cross," when I observed a fragment of flint lying on the track at my feet. As I have observed in a former communication, flint on any part of these moors is of very rare occurrence, and even in the grave-hills themselves singularly scarce. I directed my companion's attention to the piece I had observed, and requested him to look for more. It was raining too fast to permit us to stay long, but in the course of five minutes we had gathered from thirty to forty pieces. The character of most of these was clear at the first glance: they had been chipped by human hands, and with an evident purpose. I took means to have the place well examined in the course of the subsequent day, and the result was that splinters and fragments of flint, sufficient in quantity to half fill a fair-sized fishing-basket, were brought to me. Some of them were the merest flakes, or almost spiculae, like a child's finger-nail or the point of a not very large

* *Gentleman's Magazine*, January, 1863, p. 23, note. [See Note 7.]

three-cornered needle : others were portions of flint pebbles, varying in size from an inch either way to lumps presenting a surface of two or three inches square. But a very large number showed clear tokens of the purpose for which they had been intended. Some were an inch or two long, with a flat under-surface of nearly half an inch broad, and a much narrower parallel back, the diminution of width being consequent on the removal of prismatic flakes on either side, so as to form two sharp edges along the whole length of the implement. In fact, they were probably intended to form saws ; and not a few of them are so far finely notched that their action on an ivory paper-knife is very effective. Others, again, in addition to the lateral sloping planes, have similar planes at either end, so as to present four cutting edges : these are shorter than those first named. Besides, numerous instances occur in which curvilinear edges of various lengths are the distinguishing feature. A few of the longer and thicker pieces, which have been wrought into a definite form, suggest the possibility that they have had their own especial purpose : they all have one end which looks as if it had been applied to strike many blows with on other portions of like material.

There is, however, one characteristic which runs through the whole collection of wrought pieces, and that is that they are defective in one or more points ; perhaps in form—for instance, curvilinear instead of straight; or the edge has flaws or projections, or they are broken across, and the like.

There seems to be but one explanation which will embrace all the facts, and that is that this is the site of a Celtic flint-implement manufactory. There is the material, spare or waste ; the countless flakes, and spangles, and spiculae produced in the course of work ; the many failures and imperfect instruments (almost inevitable in the practice of such a craft) rejected and thrown aside as useless ; and there are the hammers used by the workmen, and some of the material roughly prepared for further and more careful manipulation. The whole seems to me remarkably interesting.

By a somewhat curious coincidence, within a day or two of my own discovery, I had inclosed to me in a note from a neighbour a flint fragment very similar in character to some of those I had myself found, and with it the information that it was one of a great number which had been picked up in some enclosures lying about seven or eight miles to the north-east of this place. From other matters mentioned in the note I was inclined to suppose that the site of another manufactory had been ploughed over, a supposition which I found had been entertained by others in possession of the circumstances. Personal examination of the locality, however, has led me at least to suspend such a conclusion, for I find the flints (not a few of them of a much more perfect character than any found by me here) dispersed over a very considerable area, and very thick in no

part of it, as far as my investigations yet extend. At the same time I should say I had not sufficient time to examine the ground thoroughly, nor to inquire of the former occupant of the farm if he had ever found any considerable accumulation in one place. But the uniform dispersion of the flints, and their character—saws, small cutting implements or knives, thumb-flints, and one very perfect leaf-shaped arrow-head (beside other ruder ones)—lead me rather to conclude that they had belonged to a numerous community anciently inhabiting the district, and had been lost, discarded, or left behind by them. I should imagine from what I saw that when the land (much of it, if not all, apparently inclosed from the moor at no very distant period) was in process of careful tillage for a “green crop,” a very large quantity of these flint relics of the remote past might be recovered.

Is it not possible that the use of the so-called “thumb-flint” may have been in chipping other flints into shape? The thicker edge in all that have come into my hands seems to have been notched or chipped quite as much by striking against other pieces as by being struck by them.

I am, etc. J. C. ATKINSON.

[1863, *Part I.*, pp. 764, 765.]

In my communication of February 28th* I gave some details descriptive of a supposed site of a Celtic flint-implement manufactory. A short time after it was written I discovered a second site of a somewhat similar character at a distance of not less than two miles south-east from the former. In this instance, again, the flint flakes and implements were found lying thickly together in a very limited space, possibly of some 6 or 8 feet square. As compared with the former specimens, there were fewer refuse pieces, very few small flakes or chippings, no (supposed) hammers, and the so-called knives and saws were larger, less imperfect, or less manifestly failures, or broken in the making, than in the first find. Thus, in a selection of eighty to a hundred now before me, I find a few which might almost be regarded as fully serviceable; several of 2 or 3 inches in length, with cutting edges on one or both sides; one or two of a miniature axe-shape; one or two others that might have done duty as arrow-heads; and the majority of the rest, portions of the knife or saw-shaped variety. This deposit, moreover, like the last, had its resting-place in the lower portion of the black or moory surface-soil, scarcely one specimen in twenty being found in actual contact with the yellow sand of the subsoil.

I have also paid a further visit to Newton Mulgrave, in the course of which I failed to ascertain that any similar hoards or accumulations of flints have been met with there. My own conclusion is that certainly none have been observed so far. At the same time,

* *Gentleman's Magazine*, April, 1863, p. 490 [*ante*, p. 66].

very considerable numbers of wrought flints are continually turned up in course of working the land for agricultural purposes. I picked up two fair thumb-flints in a field in which a man was at plough, both of which had been turned up within half an hour; and, at a farm-house about half a mile distant from this field, I saw and examined a considerable collection which had been picked up within the last year or two. Among these were some specimens of great beauty, and most wonderfully chipped. The three most conspicuous objects in the collection were a full-sized barbed javelin head of white flint, nearly perfect; a large knife 4 or 5 inches long; and a large "thumb-flint."* The latter was 3 or $3\frac{1}{2}$ inches in diameter, and very carefully chipped. A second thumb-flint, of about the average dimensions, was chipped with such extreme care and delicacy that the rounded edge almost ceased to be indented or notched, and a very little grinding would have rendered it quite smooth. There were, besides, twelve or fourteen arrow-heads of four distinct types, which I may designate as barbed, leaf-shaped, pointed ditto, and lance-shaped. The shape of the latter may be conceived from imagining two isosceles triangles described on the opposite sides of the same base, the sides of the point end being twice the length (or more) of those of the other. These, with two or three of the leaf-shaped points, were wonderfully made, their edges being chipped singularly fine and sharp and true, while the greatest thickness of the arrow seemed scarcely to exceed that of a not very new sixpence. Even if from at least one of the grave-hills in the neighbourhood, evidences had not been obtained of the possession of metal by the Celtic occupants of this district, it would seem almost impossible to suppose that such extreme delicacy and nicety in dealing with such a substance as flint could have been attained without the aid of metal; which is, I believe, the hypothesis advanced by Professor Worsaae in describing the more perfectly wrought flints found in the grave-hills in juxtaposition with implements and weapons of bronze. Certainly the contrast between the flints of the Danby Moors, in no one of the many houes on which, hitherto examined, any trace of metal has so far been found, and those of Newton Mulgrave and Roxby, where the converse is true, is about as great as one can well imagine; many of the latter being most elaborately and accurately wrought, while the former seem to owe their shape to the simplest practical knowledge of the laws regulating the cleavage of the flint.

I am, etc. J. C. ATKINSON.

* I see that Professor Worsaae, in his paper *Om Tvedelingen af Steenalderen*, gives engravings of two flints, which here would be called "thumb-flints," and designates them *Skeiformede Skrabere*. It is certainly not impossible that they may have had some such use as that implied in the said name, nor that that use should have been in connection with the preparation of the skins of animals for use. Scraping-irons with circular edges, only of much greater diameter than the thumb-flints, are, I believe, daily in use for such purpose still.

[1857, Part II., pp. 446, 447.]

An opportunity was afforded on the 5th and 6th of August last, by an exhibition of objects of archæological interest, held in the Hospitium, at the Museum Gardens, York, to test the accuracy of various opinions entertained on the subject of British antiquities. On that occasion a large number of flint weapons were shown by Messrs. Tindall, of Bridlington; Pycock, of Malton; J. Ruddock, of Whitby, and others. And as we have taken some interest, and spent some time, in elucidating the truth of the matter, we shall give the result of our inquiries as obtained by an examination of the exhibition, assisted by some other advantages we were fortunate enough to possess. In the first case we noticed a sketch of a British cup, with four feet, found near Pickering, which is the only one of the kind yet known; also a bowl-shaped cup, found in a Saxon tumulus, opened at Thirsk, for the York Antiquarian Society, by permission of Lady Frankland. These, with a small collection of arrows and spears, found in the north-east of Yorkshire, were contributed by Mr. J. Ruddock, who has had, probably, more experience than any other individual, having opened not less than three hundred tumuli. A small but very good selection of arrows, by Mr. Pycock, of Malton; they were well defined, and of undoubted character. In the same case we noticed a collection from various parts of Yorkshire, particularly near Whitby. Two cards from Billerey Dale, the scene of many forgeries, were collected by Mr. J. Coulter, a farmer of seventy, who never among the hundreds he found saw *one* of the jagged arrows which have been made so lately. In the same case were a celt of most unique form, and half of another, from Mr. Bainbridge, of York. They were found at Ayton, in Cleveland. The Bridlington collection was most extensive—in fact, it was swelled out by the admission of hundreds of flints, which, although bearing marks of having been wrought, are yet of no clearly-defined stamp; they add to the bulk, but do not increase the value, of the collection, any more than if there had only been a dozen. On card 18 there were some good arrows; there are some marked Irish, which we feel some doubt about; among them is one unmistakable "Bones." From the same source is a card of drills, No. 28, and one of hooks, No. 30. Card 12 contained one *admitted*, and several other palpable, forgeries; No. 13, adjoining, has two arrows, found by Mr. Tindall and Mr. Barugh, good,—most, if not all the rest, were spurious. Card 34 had one arrow by "Bones," as this knave is called by Whitby. In the East Riding he is known as "Jack Flint," and in North-West Yorkshire he is known as "Shirtless." He has wonderfully improved since he took to the trade, as might be seen by examining the curious specimens of forgeries gathered together here from various parts of the country, by Mr. Ruddock, for the purpose of exposing the nefarious traffic. There was a card dated

1852, rude, compared to his latter work ; yet the style is the same, if not so finished. There was a stone hammer or hatchet in Mr. Tindall's lot, and there was the sister to it among the forgeries, the precise form, size—even the material is the same. The latter, and another of the like kind, were lent by a gentleman of York, who had been *done*. Mr. Tindall had fourteen celts; several were described as Irish. No. 6 looked suspicious ; if we compared it with the forgeries, our doubts would increase. The large blue celt was made for 2*s.* 6*d.*, beautiful hammers for 5*s.* each, and some arrows and spears, whose history and place of manufacture are well known, have been sold for 1*s.* each. Some of those, except to an experienced eye, were difficult to detect, and were of greater likelihood than the Bridlington collection. Mr. Barugh, an extensive occupier of land near the above place, has searched for days together, and has instructed his servants to look over his fields, 100 acres in extent ; and although he had at one time sixty flints, mostly of the undefined kind, yet he met in all his explorations very few arrows or spears, and only *one* barbed arrow. All Mr. Barugh found went into Mr. Tindall's collection some time ago. Several of them were pointed out to us by that gentleman, who afterwards presented to the York museum thirty, which he had purchased before he knew the difficulty of obtaining genuine specimens.—*From a Correspondent of the "Malton Messenger," Aug. 15, 1857.*

[1815, Part I., pp. 209, 210.]

The two stones, *a* and *b*, wrought and formed for some particular use, of which a rough sketch is given, were lately found at Garthorpe, County Leicester, upon a bed of gravel, six or seven feet below the surface.

It is requested of your correspondents to explain their use—in what age—or whether commonly found, or scarce. For the present, let them be called a “hand-mill.” The nether millstone, *a*, is not much unlike a platter, or large shallow dish, with a shelled-off edge ; in some places chipped ; in others, broke down. The bottom is not quite flat, but gently rises to the centre (like a fish-plate), which is perforated, apparently for the purpose of a spindle. Weight, 31 pounds ; diameter, 16 inches.

The upper millstone, *b*, resembling in shape the bottom part of a cone or sugar-loaf, is extremely perfect, and was found in its proper place upon the other, which it exactly fits. At the top, *c*, is an aperture or “hopper,” 5 inches in diameter, contracting as it descends, and may hold three pints. Greatest diameter, 12 inches ; least, 7 ; and perpendicular height, 6 inches ; weight, 33 pounds. Near about the situation of *d*, is a square hole, which communicates with the bottom of the “hopper,” or that in the centre, where there is a bed cut, evidently for a frame of iron-work, which may have perished ; and, by the wearing down on that side by natural pressure, we may be

somewhat countenanced in an opinion of the handle having been fixed there. The stone (not met with in this country) is of a dirty white coarse grit, and may be taken for a rough composition of sand and mortar; and though it has not the least resemblance to mill-stones now in use, yet appears not ill calculated for the grinding of corn.

Yours, etc. W. MOUNSEY.

[1838, Part II., p. 536.]

On breaking up some common-land in Barkisland, in the parish of Halifax, a conoidal mass of stone was lately discovered, which proved to be the upper portion of a hand-mill or querne, such as was in use by our forefathers. This stone is now in my possession. It resembles the lower section of a cone. The diameter of the base is 13 inches, and that of the upper part about 7 inches, and its perpendicular height not more than 11 inches. The apex is hollowed out in the form of a cup; at the bottom of which there is an aperture, and a communication continued through the centre of the stone. There is also another small aperture on the side of the stone, which communicates with the central perforation, intended, probably, for the insertion of some iron-work to turn the stone: if so, no such remain was found, though it may have originally existed. Similar to this, another has been found near the line of the Roman road; but in neither instance was the lower half of the querne brought away; but I had reason to believe that it was destroyed in one case, or made use of for other purposes. Millstones of this description have been found among the ruins of Roman stations: indeed, we have reason to believe that this was the most common mode of grinding the corn with other nations. With the Jews, the upper millstone, which rides upon the lower, was called Receb (q. d. the rider), occurs Deut. xxiv. 6, Jud. ix. 53, 2 Sam. xi. 21 (Vide Parkhurst's Hebrew Lexicon).

In Niebuhr's "Voyage en Arabie," tom. 1, p. 122, plate xvii., fig. A, the reader may find a representation of one of these hand-mills, as still used in Egypt, with the surface of the lower millstone convex, and the upper millstone furnished with a peg or pin; and the same, in use in Barbary, is described by Dr. Shaw in his "Travels," p. 131.

This custom, indeed, of each family having millstones to grind their own corn, serves to illustrate the Law, Deut. xxiv. 6, with the emphatic reason of it. It seems that the Law, prohibiting to take the millstone to pledge, particularly refers to the upper portion of it, or the *επιμύλιον*, which corresponds with those discoveries to which I am now drawing the attention of your readers, probably because that part lying loose might be more readily taken off and carried away. With respect to the quality of the stone, one consists of a very coarse grit, the other of more compact sandstone.

J. K. WALKER, M.D.

Bronze Implements.[1825, *Part II.*, p. 174.]

A labourer lately employed in digging flints near Hollingbury Castle (the ancient earthwork or camp on the summit of the hill between Brighton and Stanmer), discovered an interesting group of antiquities, placed very superficially in a slight excavation on the chalk rock. It consisted of a brass instrument, called a celt; a nearly circular ornament, spirally fluted, and having two rings placed loosely on the extremities, and four *armillæ*, or bracelets for the wrist, of a very peculiar shape. All these ornaments are composed of a metallic substance, which, from the appearance of those parts where the green patina with which they are encrusted has been removed, must have originally possessed a lustre but little inferior to burnished gold.

[1826, *Part I.*, p. 497.]

The ancient sword (fig. 2) was found more than forty years ago, in cleansing part of the River Lark between Bury St. Edmund's and Mildenhall, in Suffolk, and is in the possession of Sir Thomas Gery Cullum, Bart. It is 2 feet in length, wanting $\frac{1}{2}$ an inch.

We have been kindly informed by the great oracle in these matters, Dr. Meyrick, that it is an ancient British sword, termed "Cleddyv." It is formed of a composition of copper and tin, a fact that enables us to assign it to the Britons, for the Roman swords and those of the inhabitants of the shores of the Baltic at the period of their respective invasions were of steel. The old Welsh adage, "He who has the horn (meaning the handle) has the blade," shows us of what material the hilt was originally made, and the three pins seen in the engraving explain in what mode the two pieces were fastened, one on each side.

[1830, *Part II.*, p. 65.]

On the 16th of June, as some labourers were digging on the common between Fulbourn and Wilbraham, Cambridgeshire, they discovered a bronze battle-axe, or spear-head, in a fine state of preservation. Some human bones were likewise found, and several iron links, much corroded, near the spot. The bronze weapon is now in the possession of Mr. W. Hancock, of Fulbourn.—Some few years since several ancient warlike instruments were found near the same spot; drawings of them were taken by the late Rev. T. Kerrich, M.A., F.S.A., and an account of them was written by the late E. D. Clark, LL.D., and published in the *Archæologia*, vol. xix., p. 46; there were five in number, and all of them consisted of bronze, namely, two swords, a spear-head, and two forrules. In the year 1819, as some labourers were trenching up a yard upon the

estate of Mr. Fromont, of Fulbourn, they discovered an earthen pitcher surrounded and covered with bricks in a very careful manner. It was given to the late Rev. R. Fisher, the rector of Fulbourn. The "Fleam Dyke," beginning at Balsham, and ending at Fen Ditton, runs contiguous to the place of these discoveries.

[1835, *Part I.*, p. 528.]

A curious sword was lately found at Nockavrinion, parish of Loughgeel, in the county of Antrim. It was discovered beneath three flags of black stone in repairing a bank of the river Bush. On it, as well as on the stones, a great many characters are inscribed. This sword, which is entirely of brass, with a huge handle, measures 5 feet 4 $\frac{3}{4}$ inches in length, and 3 $\frac{1}{2}$ inches in breadth, tapering to a point, much after the fashion of a dagger. Its weight, together with two large brass buckles found with it, is 16 lb. 5 oz. It has a very sharp edge, is remarkably hard, and seems, from several deep indentations, both on the back and edge, to have been well tried.

[1844, *Part I.*, p. 299.]

There have lately been found, under the bottom of a deep ditch in Rayne, in Essex, a number of celts, and parts of spear-heads, in bronze, evidently ancient British, together with a quantity of copper ones; the celts (heads of a sort of battle-axe) are of various sizes, and all more or less injured, and, with the fragments of spear-heads, amounted to eighteen in number. The celts had originally all been cast in different moulds. Seven of them are to be deposited in the Walden Museum: the others remain with a private collector.

[1846, *Part II.*, p. 79.]

On the 5th May, a workman, digging on the line of the Leeds and Dewsbury Railway, at Churwell, turned up nine British celts or axe-heads, along with four small javelin-heads; they are made of a mixture of brass and copper, and are evidently rough from the mould, the seam of the casting still remaining. The axe-heads are about 8 inches in length, and weigh 18 ounces each.

[1846, *Part II.*, p. 226.]

W. T. P. S. writes, "A bronze celt has been lately found, embedded in clay, on the Oxenham estates, South Tawton, about nineteen miles from Exeter. It is without loop, and has the grooves, or places in the upper part, for inserting two pieces of wood, as a handle or haft, lashed, no doubt, with cord or bandages. At Sittingbourne, Kent, January, 1828, four celts and a gouge in bronze, or bell metal, were found in an urn. Those discovered near Attleborough, Norfolk, were in company also with gouges and other implements (see C. R. Smith's "Collectanea," No. 7, pp. 105, 106). Hence it is supposed

they were workmen's tools, not warlike weapons. France and Germany boast of these *chisels* as well as Britain. A remarkable fact has lately come to light. Mr. Ralph Sanders, of the Exeter Bank, in whose possession is the Devon celt above noticed, informs me that he has a spear given to one of our travellers by the "King" of Madagascar, one end of which is the usual lance head or point, common to all spears; the other has a celt fixed on each side in grooves, identical with the one now under discussion, and with which the natives of that island used to flay, skin, or deglubate the beasts killed in their hunting excursions. Have we at last come to the knowledge of the celt as a cognate instrument, once common to the great family of mankind?

[1826, *Part II.*, p. 259.]

Lately was found, turned up by the plough, in Sutton Courtney field, near Abingdon, a curious arrow-head, that belonged to ancient Britons. It is chipped out of flint, and cannot fail of striking the attention of every curious observer. Also was found, near the same place, at the bottom of the river Isis (where it was fordable, a short space below the new bridge), a brass instrument belonging to the ancient Britons, called a celt; it is in fine preservation. In February last, as some labourers in the same parish were excavating for gravel, they discovered about 3 feet below the surface a quantity of human bones much decayed, and surrounded by a dark fine mould, almost like ashes, and by the side of which were found, standing upright, two small earthen vessels, filled with the same sort of black mould; one of them appears to have been a drinking cup; it is marked with indented strokes, and nearly 7 inches in height, but unfortunately a part of the top was broken off by the spade, owing to the haste of the labourers at its discovery, thinking it contained treasure; the other was of a different make, and only 4 inches in height; both these vessels are in good preservation, considering the length of time they must have been placed there. It can scarcely be doubted by the manner of sculpture that the deceased were either Britons or Romans; also near to which at the same time were found five different sized brass Roman fibulæ, and also a large brass ring, and near it were some fragments of iron, so much corroded by time as to moulder into dust when touched by the labourers; it is conjectured that this was some iron instrument or weapon of war, and that it was suspended by the brass ring to the body of the defunct. Fortunately for the admirers of antiquities, the whole of the above really curious articles have fallen into the hands of Mr. J. King, of Appleford, in Berkshire, a gentleman who takes great delight in preserving such rare things, and they are placed along with many others in his excellent private collection of curiosities. It may not be amiss to state, that in the same parish, and near the same place,

a few years ago, a little below the surface, were found many fragments of ancient pottery.

[1857, *Part I.*, p. 487, 488.]

The "Banffshire Journal" describes a discovery of ancient relics dug up at Colleonard. The jar is an ancient British urn, a true representative of the primitive handiwork of our forefathers, made solely by the hand of the workman at a time when the potter's wheel, though known to the ancient Egyptians, had not extended to this remote, and then barbarous, part of the earth. The urn has round the neck that peculiar herring-bone ornament common on urns of the British period. No cinerary remains were found in the urn; but its contents were still more curious than the jar itself. There were found in it, closely packed together, no fewer than seven axe-blades in bronze. The axe-blades have been presented to the Earl of Seafield, who intends to place two in the Banff museum.

Fraudulent Manufacture of Flint Implements.

[1857, *Part II.*, p. 447.]

A correspondent at Ipswich mentions the fact of flint arrows and spear-heads being manufactured at the present day at Brandon; and states that a person has been travelling with specimens, many of which he has succeeded in selling. The truth is, these rogues are encouraged and emboldened by the avidity with which collectors of antiquities buy objects, which most of them want the knowledge to understand and the experience to discriminate.

[1863, *Part II.*, pp. 68-70.]

About a fortnight ago a respectable jeweller in this city, who purchases for me such coins and other articles of archaeological interest as may come in his way, informed me that a poor labouring man had left with him several fine specimens of flint arrow-heads, which he said had been found in a barrow about 8 miles from Winchester. On seeing them, although great care had evidently been taken to soil them and make them look old, I at once said they were modern. As the price for the whole was only 1s., I purchased them, and told my friend the jeweller that he was to let me know if any more were offered to him.

In a few days the man called again with more specimens, and was at once sent up to me. He showed me about eighteen of them, and pressed me to purchase the whole, offering them at 1s. I at once challenged him with the disgraceful act of selling for antiques what he knew to be of modern manufacture. For a time the man denied the charge stoutly, and said, "Why, sir, you can see for yourself what

they are." "But surely," said I, "you cannot suppose that I can purchase these for genuine old arrow-heads? You are evidently acting dishonestly, or have been imposed upon yourself."

After a little more pressure he said, "A poor man must live, and nobody with any knowledge of the real flint weapon can be taken in with these." "Why, then," said I, "did you offer them to me?" "If you remember," he said, "I did not say what they were, I simply asked you to buy them :" and such was the case ; he had offered them at the jeweller's shop as antiques, and told the story of the barrow by way of proof, but with me he was more wary.

I now pressed him to tell me all about them. "Where did you get them. They are certainly fine specimens," said I. "Did you make them ?" The man at length confessed that he made them himself, and said that for a small consideration he would show me the "art and mystery." Pulling out of his pocket a small dirty bag, he took from it a common carpenter's awl, and the hasp which goes over the staple of a padlock, and then taking from another pocket some pieces of flint, he sat down, and holding the flint dexterously between his thumb and finger, and resting his hand upon his knee, he soon formed a beautiful specimen, exactly similar to the one marked 4 on the sketch. The awl he used for making the angles at the base, and rounding the barbs. The man's skill and quickness were remarkable, being, as he informed me, the effect of several years' practice in this art. I ought to say that the long portion of the hasp formed the handle, and the circular part the hammer with which he broke the flints. The man was evidently in great poverty, and probably an idle vagabond, and was making his way to London, and I have no doubt that on his route he has left many specimens of his ingenuity. Probably this notice and the sketch subjoined illustrative of the man's art, may save many of your readers from a gross imposition.

[See Note 8.]

I am, etc. CHARLES COLLIER, M.A., F.S.A.





Sepulchral Remains.



SEPULCHRAL REMAINS.

On some Curious Forms of Sepulchral Interment found in East Yorkshire.

[1857, Part II., pp. 114-119.]

IT will be hardly necessary to inform even the most general reader that the only intelligible remains of the earlier inhabitants of our island are found in their sepulchral interments. These, it is true, are often very indefinite, and are not easily identified by themselves with any particular race of people, but by means of careful observation and of patient comparison with other examples, they may be ultimately made to throw some light upon primæval history. It is in the hope of contributing to this object that I would call attention to a very curious class of sepulchral chests, or coffins, which appear to me quite novel, and which seem to be peculiar to East Yorkshire.

On the summit of the high cliffs near the village of Gristhorpe, about six miles from Scarborough and fifteen to the northward of Bridlington, are, or were, three ancient tumuli. That in the centre, a tolerably large one, was opened on the 10th of July, 1834, and was found to contain what was at first taken for a mere rough log of wood, but on further examination it proved to be a wooden coffin, formed of a portion of the rough trunk of an oak tree, the external bark of which was still in good preservation. It had been merely hewn roughly at the extremities, split, and then hollowed internally to receive the body. The accompanying cut (No. 1) will give the best notion of the appearance of this primitive coffin, which was much damaged in its removal from the tumulus. The trunk of the tree had been split tolerably equally, for the coffin and its cover were of nearly the same dimensions. The only attempt at ornament was what was taken for a rude figure of a human face cut in the bark at one end of the lid, which appeared to have been held to the coffin only by the uneven fracture of the wood corresponding on each part. At the bottom of the coffin, near the centre, a hole 3 inches long and 1

wide had been cut through the wood, apparently for the purpose of carrying off the aqueous matter arising from the decomposition of the body. This coffin was about 7 feet long by 3 broad. When first opened, it was nearly full of water, but on this being cleared away a perfect and well-preserved skeleton presented itself, which was laid on its right side, with the head to the south. The body, of which the skeleton measures 6 feet 2 inches, having been much too long for the hollow of the coffin, which was only 5 feet 4 inches long, the legs had been necessarily doubled up.

Several small objects were found in the coffin with the skeleton, most of which are represented in the accompanying cut. They are three pieces of chipped flint (Figs. 1, 2, 6); a well-executed ornament, resembling a large stud or button, apparently of horn, which has every appearance of having been formed by the lathe (Fig. 4); a pin of the same material, which lay on the breast, and had apparently been used to secure a skin, in which the body had evidently been enveloped (Fig. 7); an article of wood, also formed like a pin, but having what would be its point rounded and flattened on one side to about half its length (Fig. 8); fragments of an ornamental ring, of similar material to the stud, and supposed, from its large size, to have been used for fastening some part of the dress (Fig. 3); the remains of a small basket of wicker-work, the bottom of which had been formed of bark; and a flat bronze dagger, or knife (Fig. 5). None of these articles give us any assistance in fixing the age of this curious interment, except the dagger, and that is not very certain. Chipped flints are found very frequently in Roman interments, both in this country and on the Continent; and I have also found them in Saxon graves; but the dagger belongs to a type of which several examples have been found in the Wiltshire barrows, as well as in similar interments in other parts of England, which, from all the circumstances connected with them, we should be led to ascribe to a remote date, perhaps to the earlier period of the Roman occupation of the island. A quantity of vegetable substance was also found in the coffin, which was rather hastily conjectured to be the remains of mistletoe. The coffin, after being deposited in its grave, had been covered over with large oak branches. The tumulus above this was formed of a layer of clay, then a layer of loose stones, another layer of clay, and a second layer of loose stones, and the whole was finally covered with soil, which had no doubt collected upon the tumulus during the long period since it was raised.*

The wooden coffin from Gristhorpe, with its contents, were deposited in the Scarborough Museum, where they have always excited considerable interest. The skeleton, which has been unadvisedly

* An account of the opening of this tumulus, and of its contents, was published by Mr. W. C. Williamson, curator of the Manchester Natural History Society. Second edition. Scarborough, 1836. 4to.

called that of a "British chief," has by some chemical influence become as black as ebony, from which circumstance some pleasant archæologist jokingly gave to the British chief the title of the *Black Prince*. It remained a unique example of barrow interments, until I received from a friend in that part of Yorkshire, Mr. Edward Tindall, of Bridlington, information of the discovery of a similar interment near Great Driffield, in the August of last year; and soon afterwards I learnt that another oak coffin of this description had been found near Beverley in 1848. Of the latter I have received, through Mr. Tindall, some account from Dr. Brereton, of Beverley. It appears that in the year just mentioned a labourer named Fitzgerald, while digging a drain in the ground called Beverley Parks, near that town, came upon what he supposed to be a portion of the trunk of a tree, which had been turned quite black from the chemical action of the iron and gallic acid in the soil. On further examination it proved to be a coffin, which was formed very similarly to that at Scarborough. A slab, which had been cut, or split from the rest, formed the lid; but it had been fastened to the chest by means of four oaken thindles, or pegs, about the size of the spokes of a common ladder, and the ends of the coffin had been bevelled off, so as to leave less of the substance of the wood where the holes for the pegs were drilled through. This coffin was nearly $8\frac{1}{2}$ feet long externally, and $7\frac{1}{2}$ feet internally; and it was 4 feet 2 inches wide. It is understood to have contained some fragments of human bones, not calcined, but no careful examination appears to have been made at the time of the discovery. A quantity of bones of different kinds of animals were found in the soil about the spot. The tumulus, in this case, had probably been cleared away long ago, without disturbing the interment, in consequence of the position of the latter below the surface of the ground. This, I understand, was the case also with the coffin at Gristhorpe, which had been placed in a hole some depth below the original surface of the ground.

From the description I have received it seems rather doubtful whether the barrow in which the third oak coffin was found, and which is situated by one of the fine clear streams in the neighbourhood of Great Driffield, near a place called Sunderlandwick, be altogether artificial, or whether an original rise in the ground had not been taken advantage of by those who erected it. If the latter were the case, then a hole has been dug here also for the reception of the coffin; but if the whole mound, which was composed of clay, were artificial, the coffin must have been laid upon the surface of the ground. Two large and thick branches of trees had here, as at Gristhorpe, been placed over the coffin before the mound was filled in. The coffin in this instance was, like the others, hollowed from the solid trunk of a tree, but it differed from them in having no ends, and, although it came in two pieces when taken out of the earth (or rather

in three, for the lid broke in two), it was supposed by those who found it that it had been originally one entire piece, a sort of large wooden tube, or pipe, formed by hollowing through the heart of the timber. This coffin was about 6 feet in length and 4 feet in breadth, the disproportion in breadth being accounted for by the circumstance that it was intended to contain three bodies, two of which were laid with their heads turned one way, and the other turned in the contrary direction. The coffin, in consequence of the ends being unprotected, was filled with clay and sand, which had become mixed with the human remains, and the skulls and other bones were in so fragile a condition through decay, that they fell to pieces when disturbed, and did not admit of any profitable examination. I understand that no articles of any kind, which might assist in fixing the date of this interment, were found; but a quantity of ashes lay mixed with the surrounding soil, which are described as still retaining a burnt smell. The coffin in this instance lay due east and west.*

No circumstance connected with these two last interments is calculated to throw any light upon their dates, which, however, I think we may safely consider as not more recent than the close of the Roman period. But as I was putting these notes together, information reached me of a still more singular discovery. During the last two years, the local board of health at Selby has carried on extensive excavations for sewerage, etc., in that town, which have brought to light numerous ancient remains, including the foundations of a fortified gate, or bridge, of very massive character. In the month of June of the present year, while cutting through a piece of ground called the Church Hill, which is understood to be the site of the ancient parish church, destroyed when the old abbey church was made parochial, and in which considerable foundations of stone were found, the workmen met with not one, but fourteen wooden coffins, all made, like those I have been describing, out of the solid trunks of oak trees, which had been separated into two pieces in order to form a chest and lid, and had been scooped out to form a receptacle for the corpse. I have been favoured with an account of this discovery by Mr. George Lowther, of Selby. These coffins, he informs me, were found near the surface of the ground, some of them at a depth of not more than eighteen inches, lying parallel to each other, not exactly east and west, but rather E.N.E. by W.S.W., a variation of two points. To Mr. Lowther, also, I am indebted for a drawing of one of these coffins, found on the third of June, 1857, which is copied in the annexed woodcut. It was the only one which appears to have been very carefully examined, but, as far as I can gather, they all contained remains of human skeletons, though accompanied by no articles which might assist us in assigning a date to them.

* This coffin has, I believe, been given, by the proprietor of the estate on which it was found, to the Museum of the Yorkshire Philosophical Society at York.

The skeleton contained in this coffin was pronounced by a medical gentleman present at the examination to be that of a full-grown female. This coffin was 6 feet 10 inches long; one which lay near it measured nearly 8 feet. It differs in one rather remarkable circumstance from those previously described, namely, that although similarly cut and hollowed from a solid trunk of oak, the interior work is finished in a less workmanlike manner. In the Gristhorpe and Beverley coffins the cavity for the reception of the body must have been finished internally by the chisel, as their ends stand at right angles, or nearly so, to the bottom, which is flat in the whole length; but in the Selby coffin the cavity has been formed by an adze, or similar instrument, fitted for hollowing or scooping a block of wood, but not for cutting it out clean at right angles. It is also deserving of remark, that the upper part, or lid, is hollowed out in a corresponding manner to the lower part. The two parts of the coffin were in this, as in the others found at the same place, fastened together by oval wooden pegs, driven down into the sides, resembling in this respect the Beverley coffin. When it was first discovered, and the soil cleared away from it, the wood of the upper part was found decayed and broken away, so as to expose to view the face of the skeleton, as shown in our engraving.

Although we have nothing to define the age of the Selby wooden coffins, we have the certainty that they belonged to Christian interments, and that they were laid in regular juxtaposition in a church-yard. All the circumstances connected with them would lead us to ascribe them to a remote period, and I do not think it improbable that they may be anterior to the Norman Conquest. I am not at this moment aware of the discovery of coffins of the same description in other parts of the island, and they seem to show, which would indeed be a curious fact, that a peculiar burial practice had continued to exist in this district (Eastern Yorkshire) from a period dating as far back as the commencement of the Roman occupation of the island to probably a late Anglo-Saxon period, that is, during a thousand years. This should be a sufficient warning against our assuming too hastily that a particular form of interment must be characteristic of a particular date. I must, however, add, that I am rather inclined to doubt whether the contents of the Gristhorpe tumulus do not rather prove that the peculiar shaped dagger or knife found in it was in use at a later period than is commonly supposed, than that the dagger proves the extremely remote age of the coffin. From various circumstances which have come to my knowledge through the researches of Mr. Tindall and others, I am inclined to think that most of the barrows in the maritime district of Yorkshire to the south of Scarborough belong to the later Roman period, in which case we may much more easily understand how a particular form of coffin then in use may have continued in use during the Anglo-Saxon period.

It must be added, as a fact of considerable importance with regard to these interments in England, that, as I learn from the English edition of Worsaae's *Prænival Antiquities of Denmark* (Parker, 1849), examples of exactly similar coffins have been found in one or two instances in barrows in Denmark and Germany, which date, probably, from about the fourth century.

THOMAS WRIGHT.

Some Account of the Isle of Ely.

[1766, pp. 118-120.]

Letter from the late Dr. Stukely, to Mr. Peter Collinson, F.R.S., giving an account of several British Antiquities lately found near Chateris, in the isle of Ely.

The isle of Ely extends from Cottenham, Cambridgeshire, for forty miles in length, to the old river, called Nyne, running eastward to Wisbech river, which divides it from Lincolnshire, therefore called Shire drain.

The isle is, for the most part, a vast fenny level, divided into many islets of high ground; some of gravelly soil, some of chalk; separated from one another, as well as from the continent (if so we may express it), by impassable boggy ground, rivers, and large meres.

These islands of firm ground are well inhabited, have towns, and fair churches, woods, pastures, and fresh springs, so that each, in summer time, is as a paradise detached from the rest of the busy world.

The fenny parts were originally, for the main, dryer, and better ground, than now. I have largely discussed this affair, in cap. iv. of my medallic History of Carausius, Book II., on account of an artificial canal called Carsdike, which that emperor drew across it, to carry corn boats to the Scottish Pretenturæ, and of the many roads he made there.

Before Roman times, we may be well assured the most ancient Britons, when they advanced so far northward as the isle of Ely, from the southern coasts of their first landing, would greedily seize upon these islets of high ground, so fortified with rivers and fens; and erect petty sovereignties there, in soil so rich, and so secure, for each may be reckoned as a British oppidum according to Cæsar's description of that of Cassibelin, *Sylvis, paludibusque egregie munitum.*

I here exhibit a curious instance, in these remains of remote antiquity, found at Chateris, in the summer of the year 1757, and given to me by Robert Fawcet, Esq., lord of the manor; and as we may say, successor to the king, who owned these martial accoutrements before us. . . .

Chateris has its name Chartreuse, from a nunnery founded there A.D. 980, by Alfwena, mother to Earl Ailwyn, alderman of all England, founder of the noble abbey of Ramsey. The site of

Chateris monastery was probably the palace of the monarch among the old Britons, whose tomb they dug up. It was a piece of gravelly ground, pretty much elevated, towards Somershan ferry, and was his family burying place, for there were more bodies interred in the same spot.

They were not above two feet and a half under the turf. On the right side of his body, and under his arm, lay his sword ; the handle consumed, no guard or cross bar at the handle appeared. Such were the long Irish skenes ; on the left side lay the spear, the staff of it consumed ; the same must be said of his bow, for often they were buried with them. On his breast lay the iron umbo, or navel of his shield ; the materials of which it was made, a bull's hide, consumed. At his head was placed the great urn as usual, of black earth or clay ; this we suppose held the bones of his wife, burnt ; she dying before him, they were kept to be interred with him ; this case I have often observed at Stonehenge, and this was the origin of urn burial, long before the Roman name was extant ; which I take to be the present case, for this sepulture may be 3,000 years old ; and of some of the first inhabitants of our island. (See the different representations of the above mentioned instruments in the plate annexed).

The sword is only an entire body of rust ; the same may be said of the spear head, and of the umbo.

The curious glass vase was found along with the recited utensils ; it was broke in pieces, as well as the urn, by the workmen. I could not set the pieces together, so as to be certain of the exact figure of the glass ; but the pieces are of a fabric very extraordinary ; and what I have never observed before, nor can I guess at its use.

'Tis notorious that our Britons were famous for their artifice in glass works. We find many of their beads—snakestones as called—and like things of exquisite curiosity. Mr. Bell, of the Antiquarian Society, bought a curious piece in glass, representing a snake rolled up. Mr. Baker has another ; this is the thing of which Pliny writes in a marvellous fable. Some curious parti-coloured beads of theirs are to be seen, some in Mr. Edward Llwyd's plate of British antiquities in Camden's "Britannia." . . .

The iron of the spear-head is exactly half a cubit long ; some little matter above ten inches. The diameter of the umbo of the shield half that quantity.

On the 22nd of February, 1759, Mr. Jacobs, of Feversham, gave an account to the Antiquarian Society of digging up a body, near Barham Downs, of an old Briton ; a sword and spear found with it, of like manner as ours ; moreover, a necklace of glass beads was about the neck of the skeleton.

Such ornaments I observe about the necks of our British kings on their coins, whereof I have fifteen plates engraven, with their descriptions.

The glass vase found with the body at Chateris, was unluckily broken in pieces, which renders it impossible to know its exact figure or use ; but the make of it is extraordinary, and what I believe our present glass-blowers cannot perform ; many pipes proceeded from it, but closed ; I think ten in number. I never saw one like it, nor can I conjecture what its purpose was.

Antiquities, etc., discovered at Whittlesford, Cambridgeshire.

[1819, Part I., pp. 27, 28.]

We are now enabled to lay before our readers some particulars respecting the remarkable discoveries that have been made upon the estate of Ebenezer Hollick, Esq., of Whittlesford, at a place called Got Moor, between Whittlesford and Triplow, two miles from Newton.

Mr. Hollick employed some labourers to level three ancient tumuli upon Got Moor, called "The Chronicle Hills," with a view to the improvement of his land. These tumuli stood in a line nearly north and south, upon the north side of a brook separating the parishes of Triplow and Whittlesford. The old road from Cambridge to Triplow, through Shelford, crossed this brook ; it may have been a Roman way. Upon the left (*i.e.* eastern) side of it, were the tumuli, and also other sepulchres of a very remarkable nature, as we shall presently show.

The middlemost of "The Chronicle Hills" was 8 feet high, and it was 27 yards in diameter ; the others were much lower. They ranged along an ancient wall, constructed of flints and pebbles, which the workmen are now removing. Its length was 4 rods, its thickness 30 inches, and it had three abutments upon its eastern side. Beyond this wall, at the distance of 12 rods to the east, was found an ancient well made with clunch, 9 feet in diameter, full of flints and tiles of a curious shape, so formed as to lap over each other. Some of these tiles had a hole in the centre ; and, from their general appearance, it was believed that they had been used in an aqueduct. In this well were found two bucks' or elks' horns, of very large size. Upon opening the tumuli, the workmen removed, from the larger one, four human skeletons, which were found lying upon their backs, about 2 feet from the bottom. Some broken pieces of terra-cotta, with red and with black glazing, were found in opening the tumuli, heaped among the earth, which, from the nature of the workmanship, seemed to be Roman ; but this is uncertain. In opening the northern tumulus, and in removing the wall upon its eastern side, such an innumerable quantity of the bones of a small quadruped was found, that they were actually stratified to the depth of 4 inches, so that the workmen took out whole shovels filled with these bones ; and the same were also found near other sepulchres about 100 yards to the north of "The Chronicle Hills." The most singular circumstance is,

that there is no living animal now in the country to which these bones, thus deposited by millions, may be anatomically referred. The bones of the jaw correspond with those of the castor, or beaver, as found in a fossil state in the bogs near Chateris; but the first are incomparably smaller. Like those of the beaver they are furnished with two upper and two lower incisors, and with four grinders on each side. Nothing like these minute bones has, however, been yet known to exist in a fossil state. One of the professors of this University, after a careful examination of the spot, believing them to have belonged to the lemming, which sometimes descends in moving myriads from the mountains of Lapland, transmitted several of them to London, to Sir Joseph Banks, and to Sir Everard Home, who have confirmed his conjecture. According to these gentlemen there exists at present a creature of this species, called a shrew-mouse, which is exceedingly destructive to young plantations. About two years ago the Commissioners of Forests wrote to Sir Joseph Banks, to know what could be done to get rid of them. A colony of these animals may have been hemmed in by some flood, and, being all of them drowned, were perhaps thus huddled together in one spot.

Before we conclude this article, we have also to add, that about 100 yards from the north of "The Chronicle Hills" there were found two other sepulchres, in which human skeletons were found in *soroi*, constructed of flints and pebbles, put together with fine gravel. These soroi were surrounded each by a circular wall $2\frac{1}{2}$ feet thick, and about 3 feet high, 22 feet in diameter. The whole were covered beneath mounds of earth, which rose in hills about 2 feet above the soroi, having been probably diminished in height by long pressure and the effect of rains. In the first soros (which was 5 feet square, and 8 feet deep, brought to a point with pebbles) were found two skeletons. The uppermost appeared to be of larger size. Under the skull was found the blade of a poignard or knife. The head of this skeleton rested upon the body of the other. The soros was full of dirt; and patches of a white, unctuous substance, like spermaceti, adhered to the flints. It had an oak bottom, black as ink, but stained with the green oxide of copper, owing to the decomposition of an ancient bronze vessel, very small parts of which have been removed to this University, and analysed; the composition consisting, as usual in ancient bronze, of an alloy of copper and tin, in the proportion of 88 of the former to 12 of the latter. Large iron nails, reduced almost to an oxide, were also found here. In the other soros (which was 4 feet square, within its circular wall, and 8 feet deep), a human skeleton was found; and another below it in a sitting posture, with an erect spear, the point of which was of iron. Nails were found here, but no wood, as in the other soros. Here the small quadruped bones were found in great abundance. The skull of the sitting figure was stolen by one of the labourers, and carried to his own cottage at

Whittlesford: it had every tooth perfect. The robbery has given rise to a very amusing instance of superstition: for it is maintained at Whittlesford that the headless skeleton of an ancient warrior knocks every night at the door of this cottager, demanding the skull sacrilegiously stolen from his grave.

Much more might be added respecting the antiquities of Got Moor, and of "The Chronicle Hills." Many gentlemen of the University have resorted to the spot to gratify their curiosity. The mode of burial exhibited by those ancient sepulchres, added to the fact of the bronze reliques found within one of them, and also that no Roman coins have ever been discovered among the other ruins, plead strongly for the superior antiquity of the people here interred; and lead to a conclusion that "The Chronicle Hills" were rather Celtic than Roman tombs.

Barrows in Cornwall.

[1865, Part II., pp. 31-37.]

It is rather strange that the labours of Dr. Borlase, in investigating and describing Cornish antiquities, did not incite a similar desire in other Cornishmen who lived soon after his time to search out and explore kindred objects on their own account; for though the doctor has left behind him the most valuable results of a most industrious life, there were necessarily many important remains which escaped his notice, and are therefore left unrecorded. The doctor's fame was so great, and so much was he respected, that many probably shrank from attempting to follow in the same path; and so implicit was the faith in him that it was considered he had described everything in the county worthy of notice. A practical illustration of this sentiment occurred not long ago. In a western parish of Cornwall, some labourers were employed in enclosing waste land, when they came across a stone circle, and suspecting it to be akin to others popularly held in veneration, they hesitated to destroy it, and appealed for advice to a mine captain, who decided that if noticed in Borlase it should be preserved, if not, it should be demolished. The doctor's "Antiquities" being referred to, and no mention of the circle found, it was at once cleared away. Had there been some one to continue the work so well begun by the Cornish antiquary, we should have descriptions of many valuable antiquities now destroyed, and of which no records exist. So recently as 1862, Thomas Cornish, Esq., of Penzance, discovered at Bosphrennis an ancient bee-hive structure, one of the most valuable objects of archaeological interest in the county, and at that time undescribed.* In 1864 the same gentleman directed me to a remarkable barrow in the parish of Sancreed;† and

* For a notice of this hut see *Archæologia Cambrensis*, vol. ix., Third Series, and *Gentleman's Magazine*, vol. i., 1864. [See Note 9.]

† See *Archæologia Cambrensis*, vol. x., Third Series.

I am also indebted to Mr. Cornish for introducing me to another barrow of great interest at Pennance (the head of the valley), in the parish of Zennor. It is of particular interest, because so nearly resembling the giants' graves of Scilly, described and figured by Borlase ; and because it has not hitherto been known that an example of this kind of structure existed in Cornwall. It may be said to be an intermediate step between the simple rectangular kistvaen of a cromlech and the subterranean galleries, such as those of Bolleit and Pendeen. It is in fact a walled chamber within a mound, which has a diameter of 23 feet, and is 8 feet high. On the south-east side the mound has been broken away to give access to the cell, which measures 9 feet 6 inches in length, is 4 feet wide, and 4 feet 4 inches high ; the roof being formed of large slabs of granite thrown horizontally across ; and the end of the chamber consists of a single slab. The first slab of the roof is lower than the others, the height from the floor to its under surface being 3 feet 6 inches only, and has the appearance of being designed as a lintel, for probably an entrance originally existed at this end, the chamber being used for repeated interments, as Dr. Borlase suggests with regard to the giants' graves of Scilly, and the opening blocked with large stones. The mound is composed chiefly of stones piled around and over the cell : some earth was used ; and the base is encircled by a consecutive series of retaining stones, some of which are of large dimensions. The surface of the mound has become thickly overgrown with vegetation, and thorns and furze-bushes have taken root on the summit.

The floor of the chamber is nearly level with the surface of the field in which the mound is situated, and does not appear to have been flagged. All deposits must have been removed years ago, for the barrow has long been in its present condition. Digging, probably, would be of little use ; indeed, many of these ancient walled graves have turned out to be disappointing to investigators. Dr. Borlase, referring to the smaller of two caves which he explored in Scilly, says he found "on one side in the floor a small round cavity dug deeper than the rest ; it was covered with flat rocks, as the former. In both these we found neither bone nor urn, but some strong unctuous earths, of different colours from the natural, which smelt cadaverous."

And here, for the sake of comparing the Pennance with the Scilly barrows, I subjoin Dr. Borlase's description and plan of one of the latter : "There is a very singular kind of barrow which obtains throughout all the Scilly Islands : they are edged with large stones, which form the outward ring ; in the middle they have a cavity walled on each side, and covered with large flat stones, and over all is a tumulus of small stones and earth, in some more of earth than stones, in others *vice versa*. Upon opening it in the middle of the barrow we found a large cavity, as represented in the plan, full of earth ; there was a passage into it at the eastern end, 1 foot 8 inches wide, between

two stones set on end. In the middle it was 4 feet 8 inches wide, the length of it 22 feet. It was walled on each side with masonry and mortar, the side 4 feet 10 inches high ; at the western end it had a large flat stone which terminated the cavity; its length bore east and by north, and it was covered from end to end with large flat stones, several of which we removed in order to get at the exact dimensions of the cavity, and others had been carried off for building."*

On Conquer Down, in the neighbouring parish of Towednack, and about two miles from the barrow described above, was a barrow about 45 feet in diameter, and 6 feet high. It could be seen that the base consisted of a circle of enclosing stones, but the mound itself had become thickly turf-clad. In the year 1862, some labourers having to build a hedge for enclosing land, and the line of fence crossing this barrow, they cut into it, and found that it was composed entirely of stones ; when approaching near the centre they came on an urn, mouth downwards, on a large flat slab of granite. Within were several fragments of human bones, and signs of the action of fire amongst the neighbouring stones were very apparent. There was no regular kistvaen formed, but the stones were carefully built around the urn, which was protected above by a larger slab. The urn was removed entire, and taken into a cottage a few yards distant ; but the good housewife, in accordance with a general superstition of this district, that the ghost of the ashes which it contained would come after it, insisted on its instant removal, when it was hid in a hedge near the barrow.

On Saturday, May 20th, I had the pleasure to accompany a party of ladies and gentlemen, who were desirous of ascertaining what might be discovered by a further investigation of this barrow. Mr. Cornish had kindly made every arrangement for the exploration, and, being favoured by a remarkably fine day, operations were commenced by continuing the trench southward of the spot where the urn was found. Three workmen were employed, and after digging for two hours, it became evident that nothing of interest was likely to be discovered ; there continued to be the same monotonous repetition of stone after stone. We then turned our attention to the eastern side, working towards the edge of the mound, in hopes some secondary deposits might have been made around the principal interment, but with no result.

This barrow, therefore, appears to have consisted simply of a mound of stones around and over one urn, which was placed in the centre, in the manner described above. The barrow, however, was depressed a little just over the urn, and the person who exhumed it stated that this was found to be the case in other barrows in the vicinity from which urns had been taken.

The urn, which was fortunately recovered by Mr. Cornish, is of an

* "Antiquities of Cornwall," p. 207, ed. 1752.

unusual form as compared with others found in Cornwall, being nearly cylindrical, with the upper rim inclining a little inwards, and ornamented with four encircling lines of dotting, with a pretty regular and deep zigzag pattern between. The greater part of the bottom has unfortunately been broken away, and the lower part of one side is also wanting. This urn is composed of a coarse clay of a light greyish brown colour, and sun-dried.

About 94 yards north-west of the barrow last described is another of less dimensions, measuring 36 feet in diameter, and 4 feet in height. To this we now transferred our labours, and cut a trench from the north side, which had recently been broken into by persons wanting stones for hedging, into the centre, which was depressed similarly to the barrow first opened. When near this spot we found traces of burning, and among the stones at the base of the barrow several fragments of bones, some probably of an animal about the size of an ox, with others of a smaller animal.* No regular cell appears to have been constructed to contain urn or ashes. Near the bones lay the half of a flint pebble, which had been artificially broken.

This barrow, like the first, consisted of stones heaped together without any attempt at order. Its surface was very irregular, owing probably to stones being from time to time carried away; but the spot where the bones lay did not appear to have been previously disturbed.

Although at the time we should have been gratified by the discovery of an urn or a kistvaen, the result of our labours cannot be considered unsatisfactory. The first barrow was proved to contain only one urn, and in the second it appears that an interment had taken place without any careful protection being made for the ashes of the deceased.

Mr. Thomas Wright records in his "Essays on Archæology," that after bestowing the labour of several men for more than a week on the great tumulus of St. Weonard's, he found nothing more than bones and ashes; and numerous instances of a like result might be given respecting other grave-mounds.

Whilst referring to the St. Weonard's tumulus, it may be worth while to notice here a curious feature in its construction, because a similar instance occurred at Pelynt, in Cornwall. Of the St. Weonard's mound Mr. Wright says: "One of the most interesting circumstances connected with the cutting itself was that of the regular discoloration visible on the surface, arising, of course, from the employment of different kinds of material, and displaying in a most remarkable manner the mode in which the mound was raised."

* At a recent meeting of the Archæological Institute, the Rev. W. Greenwell, in relating the results of his examination of barrows in Yorkshire, stated: "In one remarkable instance two goats had been deposited with the corpse." See *Gentleman's Magazine*, June, 1865, p. 730.

The section accompanying the description shows the layers of different material. The barrow at Pelynt, opened in 1845, is described in the twenty-eighth annual report of the Royal Institution of Cornwall. The writer, the late Mr. W. H. Box, of East Looe, states :

"On completing the trench it was observed that each of its sides was marked by strata of different colours, extending horizontally over 10 or 12 feet of its centre. The uppermost was a stiff black loam, varying in depth from 3 to 4 inches, with large pieces of charcoal imbedded in it; this was separated by a layer of common earth from another of similar dimensions and texture, of a deep orange colour, which, like the former, rested on a vein of earth. Supporting these was a third, about 2 in. in depth, that from its light grey appearance was at first thought to be sand, but on examination was found to possess more of the character of clay than either of the former. The space beneath to the floor of the barrow, which was 18 to 20 in., was occupied by a bed of the natural soil. The origin of these coloured veins must ever remain a subject for conjecture. Their uniform extent and regularity afford strong evidences of design in their arrangement; and as the surrounding neighbourhood furnishes no soils at all like them, either in colour or conformation, we cannot easily imagine them to be composed of primitive strata."

Though Dr. Borlase has recorded his experience in opening some barrows in Cornwall, and a few similar narratives may be found in the Reports of the Royal Institution of Cornwall, it must be admitted that our knowledge of the internal arrangement of Cornish barrows hitherto opened has been gleaned chiefly from the labouring classes, who have in their agricultural or mining pursuits accidentally broken into them. It would be desirable to investigate others, taking careful notes and drawings of what they might contain, and then restore them, as far as possible, to their original condition, replacing bones and rebuilding the mounds.

J. T. BLIGHT.

King-barrow, near Wareham, Dorsetshire.

[1767, pp. 53, 54.]

On digging down King-barrow, January 21, 1767, at the south end of Stowborough, near Wareham, in Dorsetshire, in the road to Grange, to make the turnpike-road, the following discovery was made. The barrow was 100 feet in diameter, its perpendicular height 12. In the centre, at the bottom, even with the surface of the ground, in the natural soil of sand, was found a very large hollow trunk of an oak, rudely excavated, but probably by hand, 10 feet long; the diameter, from out to out, was 4 feet; that of the cavity, 3 feet: it lay horizontally, S.E. to N.W.: the upper parts of the ends were much rotted. The barrow was composed of strata, on layers of turf, in some of which the heath was not perished. In the cavity were found as

many human bones as might be contained in a quarter of a peck, about 12 in number, viz., an arm-bone, two thigh-bones, two blade-bones, the head of the humerus, part of the pelvis, and several rib-bones. They were unburnt, soft, and black; the ribs would lap round one's finger. There were no remains of the skull; many were scattered and lost, more were entirely consumed. These bones were wrapped up in a large covering, composed of several skins, some as thin as parchment; others, especially where the hair remained (which showed they were deer-skins), were much thicker; they were generally black, and not rotten; they were neatly sown together, and there were many small slips whose seams or stitches were scarce two inches asunder. As the labourers expected to find money, they were pulled out with much eagerness and torn, so that the shape of the whole could not be discovered. This covering seemed to have been wrapped several times round the body, and in some parts adhered to the trunk: in the middle of which covering most of the bones were compressed flat in a lump, and cemented together by a glutinous matter, perhaps the moisture of the body, which was not inflammable. The covering did not reach to the N.W. end, and perhaps not much beyond the body, towards which the thigh-bone was found; this, and the situation of the urn, may determine the position of the body. On unfolding it, a disagreeable smell was perceived, such as is usual at the first opening a vault; near the S.E. end was found a small vessel of oak, the colour black; it was much broken, but enough preserved to show it was in the shape of an urn (a specimen of which is here presented). On the outside were hatched (no doubt with a graver) many lines, some horizontal and others oblique: its longest diameter at the mouth was three inches; the short one, two; its depth, two; its thickness, two-tenths of an inch. It was probably placed at the head of the corpse. There was no appearance of any ashes in it, or any part of the covering. There was a piece of gold-lace, as imagined, four inches long and two and a half broad, stuck on the covering in the inside, black and much decayed. Bits of wire appeared in it, and here were no fragments of brass or iron from whence one might have concluded any arms or armour were deposited here.

A.D. 876 the Danes possessed themselves of Wareham. Next year, King Alfred besieged them there, and, partly by force and partly by treaty, obliged them to quit that place. During this time the barrow was probably thrown up over a person who died or was killed in some action. The largeness of the barrow evidences that the person interred under it was a person of note and distinction, perhaps a general officer. The opinion of the learned is desired concerning this extraordinary manner of interment, and some information whether a similar instance occurs in this kingdom.

JOHN HUTCHINS.

Antiquities in Sussex like those in Dorsetshire.

[1768, p. 284.]

Of the many essays on the natural history and antiquities of different parts of England that have from time to time been published in your Magazine, none has given me greater pleasure, on perusal, than the account of the Dorsetshire antiquities and natural curiosities, inserted in the Magazine for March last [see *ante*, p. 94]; as some particulars in it seem to correspond with others of the like kind in Sussex.

Pits of the same form are to be seen on several parts of the South Downs; but the most that I have observed are on that part that lies between the rivers Ouse and Adur, in the neighbourhood of Lewes, Brighthelmstone, etc., but have taken notice of none so large as those of Dorsetshire are said to be, nor do they lie so closely conjoined together. For what use these pits were designed, or by whom made, is perhaps difficult to be known; but one thing seems very plain, and that is, that they were made by art, as the soil is firm and chalky. At my first viewing them, I readily concluded that they were the work of some remote age; and, perhaps, nothing more probable than for them to be made by the Britons for some religious use.

All along the sea-coast, between Shoreham and Brighthelmstone, is found washed up by the sea a bituminous substance (exactly agreeing with the description of the Kimerage coal) called by the inhabitants Strumbolo, and which, till of late years, was the chief fuel of the poor inhabitants of Brighthelmstone, who were very careful to pick it up after it was brought up by the tide; but since that town has become more populous, by the resort of gentry, it has grown out of use, on account of the nauseous smell it emits at burning. As no stratum of this fossil is to be found in the cliffs on the coast of Sussex, it must consequently form the bottom of the sea, and, by the violent agitation of the water, be torn up, and brought on shore by the tide.

On almost all parts of the South Downs may be seen a great number of barrows, some of which are large and scattered singly, here and there one; on other parts they are smaller, and a great many near together; they are chiefly of a round form, with a trench round their basis, and a circular cavity on their top. There are likewise some few of the long kind, the longest of which, that I have seen, is on the hill near Aldfriston, which is about 130 feet in length. It has three cavities on the top, like those of the round fashion, one being at each end, and the other near the middle, with a ditch on each side. A few years since, this barrow was opened in part at the north end, but no signs of interment discovered.

Whether Britons, Romans, or Danes had the greatest share in erecting these lasting monuments to the dead there is perhaps no certain proof of, as it is agreed that they all erected such monuments,

and all adopted the custom of cremation and depositing the ashes in an urn.

According to Olaus Wormius, the Danes raised long barrows over their sea-commanders who died, or were slain in battle, they being made to represent a ship, as a distinguishing mark of honour from other officers, who probably had other forms of interment.

Yours, etc. STEPHEN VINE.

[1768, pp. 608, 609.]

Mr. Hutchins inserted in your magazine for March last the dimensions of a vast long barrow at Shipton Hill, Dorset, which he compares to a large ship turned bottom upwards; and Mr. Vine in June last mentions a similar shaped one of much smaller proportions in Sussex. In Salmon's "Survey of England," p. 618, is the following account of another in Northumberland: your inserting of which may induce some of your correspondents to favour the public with its exact dimensions: "At Haltwesel, near the West of Northumberland, upon an eminence above South Tyne, is a remarkable barrow of the long kind, such as Ol. Wormius has described. That author tells us it was the practice in Scandinavia, and that part of the north, to make sometimes long barrows as well as round. The long were in imitation of a ship. This, which the swains there call Castle Hill, is not in form of a castle, nor of a defensible shape, but made for victory and triumph. It bulges out on each side like a ship, is contracted at both ends, and is lower in the middle than at the head and stern. Whether this last circumstance is by accident or design I don't take upon me to say. But as the Danes have been hereabouts, 'tis probable upon some considerable success they erected this monument." The passage of Wormius referred to, I suppose, is in Mon. Dan., p. 42. "*Regios tumulos ad magnitudinem et figuram carinae maxima navis ex iis quas possidebant, fabricatos volunt.*" This shape he confines to the tomb of kings, and to the earlier age when the dead were burnt. Perhaps the name of Shipton might be given to the Dorsetshire hill from its form. It is 250 feet longer than Silbury, and does not appear in Taylor's map.

Other passages in Wormius, p. 41, may throw light upon the great barrow in the Isle of Purbeck, described in your magazine, April, 1767. "In locis saxosis et maritimis ex lapidum et arenæ congerie monticulos struxerunt; in pinguioribus ex terra fertili rarioribus additis saxis, basin, coronæ instar, cingentibus." Of this last sort was one containing urns near a village in Zealand called Eggerup.* Another sort were hillocks of earth in a circle of large stones, with turf and stones on the outer surface. These contained bodies, which were sometimes lodged in rude-stone vaults under the surface, and sometimes had a kind of stone cell erected over them without.

* *Prope Crucis oram.* I don't understand this last name; but in De Wit's map of Denmark, Aagarug is placed not far from Roschild.

Purbeck barrow answers in some respects to both these; but chiefly in its name to the village near the former. Egger, or Agger, is a name not unfrequent in Zealand. Besides this village, there is a little island on the S.W. coast called Agger. In Dorsetshire we have a hundred called Eggerton, or Eggarton, probably from the considerable camp on Eggerton* or Aggerton hill; Eggerton or Eggarton in Cheshire, whence the noble family of Bridgewater derive their name; Eggerton near Charing in Kent. Length of time will change the *r* into *l*; and so we come by Egglestone or Agglestone, the first of which occurs in Dorset, near Kimeridge. *Haug* is Danish for a hill, and the period in which the dead were buried under barrows is called *Haugs auld*, i.e., the age of hills. (Bartholinus.) *Eggar* may be a corruption of the Latin word *Agger*, and so alike applicable to a barrow or a camp. I am somewhat inclined to think it conceals the name of a person, because a similar barrow in its neighbourhood, once surmounted by a small stone, bears the name of *Puck*, which is probably the corruption of some other appellative. The least reflection on the situation of rock-basins, would show they could never have been here. They are found on natural hills, and in a more wild and rocky part of the country.

Mr. Vine [August, 1763, p. 396] speaks of knives found in the Sussex barrows. Wormins describes daggers (*pugiones*), some 2 spans, others 15 inches long, found in Danish ones. If you will insert the enclosed outlines of two from his *Mon. Dan.*, p. 50, you will give Mr. V—— an opportunity of informing the public whether those instruments in Mr. Lucas's possession are like them.

Mr. H—— describes a circle of stones at Winterburn Abbey in Dorset: Dr. Stukeley in his *Abury*, p. 45, part of two concentric circles at Winterburn Basset, Wilts. The stones remaining in each bear the same proportion to each other, but the diameter of the Wiltshire one is greatest. Dr. S——'s lie north of Abury, and Mr. H——'s north of some other stones which may have formed a considerable circle. Had Dr. Stukeley made the same search in this as he did in other counties, we should doubtless have had as curious discoveries. I cannot, therefore, conclude these observations without regretting the hard fate of Mr. H——'s elaborate history, that it is so long withheld from the public, to whom he is forced to deal it out by such piece-meal anticipation.

D. H.

Barrows in Dorsetshire.

[1790, *Part II.*, pp. 897-901.]

If the life of man be short, as it is termed in Scripture, it is a wish congenial to his heart, that his memory at least should be of long continuance. This sentiment accounts for the universal

* Coker spells it Edgarton, which seems wrong.

practice of raising sepulchral monuments, and is finely illustrated by the plaintive Gray :

For who, to dumb forgetfulness a prey,
This pleasing, anxious being e'er resigned ;
Left the warm precincts of the cheerful day,
Nor cast one longing, ling'ring look behind ?

The most simple and natural kind of sepulchral monument, and therefore the most ancient and universal, consists in a mound of earth, or a heap of stones, raised over the remains of the deceased. Of such monuments mention is made in the Book of Joshua, and in the poems of Homer, Virgil, and Horace ; and of such, instances occur in every part of this kingdom, especially in those elevated and sequestered situations where they have neither been defaced by agriculture nor inundations. It has often been a subject of surprise to me that, in an age marked by its taste for antiquarian researches, greater attention should not have been paid to these most ancient and genuine records of past ages, so far, at least, as to ascertain to which of the successive inhabitants of this island they are to be ascribed, or whether, in fact, they are the work of more than one people. This can only be done by an examination of the contents of several of them in different counties, and in different situations, by persons whose learning, ingenuity, and attention qualify them for the task. In searching, however, into these rude memorials of our forefathers, the true antiquary will ever respect their remains ; and, whilst he enters into their views by endeavouring to revive their memory, he will also as far as possible consult their wishes, in leaving to their bones their ancient place of sepulture.

Having been lately on a visit to a gentleman in Dorsetshire, on whose estate an incredible number of these barrows are found, he kindly complied with my wishes in causing several of them to be opened. I shall first describe, in the most accurate manner I am able, the contents of the several barrows ; and then give such conjectures as occur to me concerning the people to whom they belonged ; not without a view, however, that greater light may hereafter be thrown on the subject by persons whose experience and information in this branch of antiquarian study are superior to my own.

We began with two barrows of no great dimensions, opposite to East Lullworth, on a level piece of ground that is met with in the ascent up of a steep and lofty mountain, the top of which is crowned with a bold double entrenchment, of Roman or Barbaric workmanship, and which is known by the name of Flower's barrow. If we pay any regard to the conjectures of Hutchins, in his "History of Dorsetshire," who derives the name of Flower's barrow from a supposed Roman general of the name of Florus, the question will be solved at once what people raised this strong intrenchment ; and it will afford some kind of presumptive proof that the barrows below

contained Roman remains. But we are to observe, that he produces no proof whatever of any Roman general of the name of Florus ever having been in those parts ; nor does the figure of the camp affect the Roman quadrangle, but seems rather to humour the natural shape of the hill. Indeed, part of it, by some convulsion of nature, appears to have sunk below its original level, while no small portion of it has fallen into the sea below, which, at the depth of 700 feet, is for ever undermining its rocky base. In these two barrows we found promiscuously scattered perfect human teeth, burnt human bones, together with those of animals, such as pieces of the jawbones of horses or oxen, teeth of the same animals, tusks of boars, small round stones of the Portland kind, not bigger than children's marbles, pointed stones that possibly have been the heads of weapons, certain lumps of corroded metal, seemingly iron, but of an undetermined shape, a few particles of yellow metal, which being lost could not undergo the assay ; some crumbling pieces of dark-coloured unburnt urns, together with a few lumps of brick or earthenware that appeared to have been well burnt. In addition to all this, we perceived a considerable quantity of fine, rich, black earth, with a certain white mouldiness between the particles, which must have been fetched from a considerable distance, and which I have invariably found strewed over the remains of the dead in these ancient sepulchres. The bottom of one of these graves was paved with large round stones, that had been worked smooth by the action of the sea, and which apparently had been fetched from the adjacent shore.

From the confused state in which we found the contents of these two barrows, which indeed were situated near what had formerly been an inhabited spot, as the name of Arish Mill indicates, we were satisfied they had been in some past time disturbed ; we therefore determined to make our next research in a more remote and inaccessible situation. With this view we pitched upon a large barrow, being 12 feet in perpendicular height, and 200 feet in circumference, situated at the highest point of a lofty mountain about midway between the Points of Portland and Purbeck Islands. This tumulus is known in the country by the name of Hambury-taut, or toote, the first of which words, I conjecture, may be the name of the chieftain there buried, while the other two appear to be the corruption of Saxon and British words expressive of a barrow. Many of the same articles were found on the surface and at the extremities of this, as in the former barrows, such as burnt human bones, bits of metal, etc. ; but on our approaching to the centre, at about the depth of 4 feet from the surface, a skeleton appeared, in perfect preservation, lying with its head to the north, but so tender as to crumble into dust with the least pressure; its posture, which was that of a person sleeping on his side, with the feet rather drawn up, one hand resting on its breast, the other on its hip, prevented it

from being accurately measured. The account of the people, however, employed in digging, we found afterwards, had magnified it to the size of 7, and even of 8 feet. But what may be said with certainty is, that the thigh-bone measured 20 inches, which in a well-proportioned man, I find, gives a height of 6 feet and about as many inches. One of the leg-bones appeared to have been fractured; but whether this had happened by some wound in war, or by some accident at the funeral, or by the weight of the superincumbent earth, it is impossible to determine. On the breast of the skeleton was deposited a rude urn, too much decayed to be handled without falling to pieces, of about the measure of two quarts, but empty of everything except the same fine mould that covered the skeleton. Near the neck of the latter were found many of the round stones I have before mentioned, but of different sizes, from that of a pigeon's egg down to that of a pea. As they were imperforated, it is not improbable they had once been covered with metal, in which state they might have formed a necklace, or any similar ornament. The substance of the barrow, as high as the site of the body, was formed of flints and stones, into which a shaft was sunk to a considerable depth, but without finding anything worth notice. The next day, however, the country people, who had witnessed the diligence of our researches, which they conceived must have had an object of greater value in view than bones and earthen vessels, being encouraged, moreover, by a popular tradition that a treasure lies hidden in the earth somewhere between Weymouth and Purbeck Island, they assembled, I say, and dug to the very bottom of the centre of the barrow, where they found nothing but a large heap of ashes, in all probability the remains of a funeral pile which had been erected on that spot. Another small barrow, that was opened the same day, yielded nothing but bones and broken urns.

Unavoidable business calling me home at the end of the week, my respected friend communicated to me, by letter, the result of his searches the ensuing week, of which the following is an extract:

"On the Thursday after you left us, we pitched our tent near another of those barrows, and set to work upon it. We discovered, at about the depth of 2 feet, no less than five distinct skeletons: three of them were in a row, lying on their backs, two of which appeared to be of the common size, but that in the middle was a small one, probably of some young person. The two others were at the distance of a few feet from these, of the ordinary size, with the head of one lying on the breast of the other. Each of the skeletons had an urn upon it; but these were so perished, that upon being touched they fell into earth, except a few pieces near the top rim of one of them, which I have preserved for your inspection. Under the head of one of the three that lay in a row we found a small earthen urn, about the size of the cup part of an ordinary wine-glass."

I have only to add to this account that the small urn just mentioned, which was of the same shape with the rest we found, namely, that of a truncated cone, was about 2 inches high, and 1 in diameter, and that, though nicely covered with the shell of a limpet, it was quite empty: likewise that the broken pieces of urn were ornamented by being rudely indented in a zigzag fashion; and that the five skeletons were not all exactly on the same level in the barrow, which appears to have been a family sepulchre, but that the two last-mentioned seemed to have been deposited in the side of the barrow without taking it to pieces.

Five or six other barrows in the same neighbourhood have since been opened by the same gentleman; but, as the contents of them all were nearly the same, I shall satisfy myself with giving an account of one of them, which was opened in my presence. It was one out of three which stood in a line at about the distance of 150 feet from each other, being about the same number of feet in circumference, and about 10 in perpendicular height. On a shaft being cut to the centre of the barrow, we found a kind of rude vault, or *kistvaen* formed with unhewed stones, enclosing an urn capable of holding about two gallons, and full of burnt human bones, being covered at the top with a thin, flat stone, and having a quantity of the roots of quileh-grass, undecayed, near it, which also frequently occurred in the other barrows. The urn in question was composed of a coarse black clay, of the shape above-described, and did not seem either to have been turned with a lathe, or burnt in a kiln, but merely hardened by fire or the heat of the sun. Of the same substance and form were all the other urns discovered in this neighbourhood: there was this difference, however, in their position, that some of them stood upright, and others were found inverted.

The uniformity observed in the barrows I have described, in shape, situation, apparent antiquity, and, to a certain degree, in contents, seems to argue that these at least were the work of one and the same people. Who these were remains now to be considered. I think it is plain they could not have been the Romans; for though these were in the practice both of burying and burning their dead entire, as appears from the Twelve Tables, and from other monuments, yet the rudeness of the present urns, so unlike the neat, polished ones I discovered last year near this city, together with true Roman fibulae, coins, etc., and which have been honoured with a place in the *Vetusta Monuments* of the Society of Antiquaries; the situation of these sepulchres on lofty mountains and sequestered mounds, whereas the Romans affected to bury near cities and close to highways; add to this, there being no sepulchral lamps, lacrymatories, coins, or other tokens of Roman sepulture; all these circumstances, I say, point out barbarians, and not Romans, as the constructors of these barrows. We must therefore ascribe them to

one of the three following nations, viz., the Britons, the Saxons, or the Danes; and we must attribute these works to one of them previous to its conversion to Christianity, as, wherever the Christian religion prevailed, it immediately banished the Pagan rite of burning the dead, as appears from many Canons of Councils to this effect, and introduced the use of common cemeteries consecrated to this purpose. Of the above-mentioned nations, the Danes seem to have the weakest claim to these numerous barrows, as (independent of other arguments that will occur below) they never seem to have been stationary in this part of the kingdom for any considerable time till their princes and the nation in general professed themselves Christians; whereas in the above-mentioned barrows there is even some appearance of family sepulchres. It remains, then, to consider whether it is more reasonable to attribute these ancient monuments to the Britons previous to their adopting the manners of their conquerors the Romans, or to their more fatal enemies our Saxon ancestors. For my part, I think there are more and stronger arguments for ascribing them to the former than to the latter people. For though both the Celts or Gauls, of whom the Britons were evidently a tribe, as appears from the uniformity of their language and of their civil and religious rites, and the Germans, of whom the Saxons formed an illustrious portion, were both in the practice of at least occasionally using funeral piles, barrows, and urns; as Montfaucon has discovered in regard to the Gauls, and Gronovius with other German antiquaries in respect to their forefathers; yet there is this striking difference between the two people, that the former, according to Cæsar, were fond of the pomp of funerals, sacrificing various animals as well as men on the occasion, and burying with the dead whatever they had that was most precious: whereas the latter, according to Tacitus, despised the fruitless ambition, as they considered it, of magnificent funerals; and it was only on some extraordinary occasion that the warrior's horse was buried with his master. Morton adds, that the Saxons had laid aside the custom of burning their dead previous to their invasion of this island; but whether the last-mentioned assertion rests upon sufficient proof, or not, I think the evident consequences to be deduced from what has been alleged above, when considered with respect to the contents of the barrows in question, likewise the very great antiquity of these barrows, manifest by the condition of the metal, bones, and urns found in them. Again, the coarseness and rudeness of these urns, which, in my opinion, rather bespeak the manufacture of the savage Britons than of the Saxons, who by their very piracies upon civilized nations were a polished people at their conquest of this island, compared with the former six hundred years before; and, above all, the conformity between these barrows and those opened by Dr. Stukeley and others in the neighbourhood of

Stonehenge: all these circumstances, I say, considered together, induce me to attribute the barrows I have described to the aborigines of this island, the Britons, rather than to the Saxons, or any later people. With respect to the argument I have drawn from the conformity between these barrows and those near Stonehenge, I take it for granted that this stupendous pile of barbaric magnificence is allowed to have been a Druidical temple; and that the barrows with which it is surrounded had some relation with it, and belonged to the same people by whom it was constructed.

A very great difficulty, however, remains to be explained, which is, that some of these barrows contained nothing but urns full of burnt bones, while others contained entire skeletons, with urns placed upon them, and with burnt human bones, charcoal, and ashes, scattered throughout the tumulus. To account for this I must refer to the authorities adduced by the learned and ingenious author of the "History of Manchester," to prove that the ancient Britons were in the habit of using both rites of funeral, that of burning and that of burying entire. It is probable that, at Hambury Toote, and such other barrows as contain vestiges of both practices, the captives, slaves, and animals, destined to appease the manes of the deceased chieftain, or to accompany his departed spirit, were killed and burnt on the spot, and that afterwards a barrow was raised over their ashes, near the summit of which the body of the chieftain himself was buried entire. The urn placed on the breast of the corpse probably contained ointments, or valuable articles belonging to the deceased, in conformity with Cæsar's account of the British funerals. This conjecture is confirmed, in my opinion, by the diminutive size of the small urn covered with a limpet shell, mentioned above, as it appears too small to have answered any other purpose we are acquainted with. It is possible that one of those horrid sacrifices, which the author just quoted describes, might have made part of the funeral rite performed at some of these barrows, in which a considerable number of human victims were enclosed in a kind of cage made of basket-work, and burnt alive, in order to render propitious the bloodthirsty deities of the Druids.

JOHN MILNER.

British Antiquities at Winford Eagle, Dorset.

[1827, Part II., pp. 99, 100.]

I cannot help sincerely joining in the wish expressed by your venerable correspondent R. C. H. [see Note 10] in one of your late numbers, that the Antiquities of the County of Dorset should meet with a more adequate investigation than has hitherto been presented to the public; for I believe that, with the exception perhaps of Wiltshire, there will not be found a district in this kingdom which presents more numerous and more evident traces of the Ancient Britons, as well as of the Romans.

By way of rescuing from oblivion a discovery which has lately been made in that county, I send you the accompanying rude sketches, with a statement, which, if you think proper, may be inserted among your valuable records of antiquity.

These remains were brought to light in the month of September last, upon an estate of the Lord Chief Justice Best, in the parish of Winsford Eagle, nearly adjoining the eastern side of an ancient road, leading from Maiden Newton, through Winford Eagle, to Compton Abbas, and the British entrenchments on Eggardon Hill. Some workmen, who were digging stone for the foundation of farm buildings, discovered, at the depth of about $3\frac{1}{2}$ feet from the surface, and $2\frac{1}{2}$ feet from the top of the rock, a circular cavity or cist of about 3 feet in diameter, and 4 feet in depth, containing a perfect human skeleton, and the two cups or utensils here represented. The bones had fallen to the bottom of the cist, and on the admission of the external air crumbled to dust, excepting, among a few others, the scull and the jaw-bone, which still retained some teeth.

The vessel, Fig. 1, was broken by the workmen in their eager hopes of obtaining some treasure; but the other, Fig. 2, is nearly entire, and is now in my possession; it is of the rudest manufacture and appearance, being composed of earth unglazed, and apparently dried in the sun; it is 6 inches in height, and the same in diameter, and about a quarter of an inch in thickness; it is entirely destitute of ornament, but there appears to have been a slight projection round the rim. It is difficult to say to what precise period of antiquity this deposit must be assigned, but that it was long prior to the invasion of this island by Julius Cæsar there can be little doubt; this may be inferred by the absence of coins or ornaments, by the body not having been burned, and especially by the position of the skeleton. The mode of interment among the Ancient Britons and Gauls, was either by consigning the remains entire and undefaced to the ground, or by previously reducing them to ashes; the former is the most natural, and the primitive mode of sepulture; the latter a refinement upon it, and consequently of subsequent date. The position of the bones, in this instance, bespeaks also a very early date; for it seems probable, notwithstanding their situation when found, and judging from the size and shape of the cist or cell, that the body was originally placed in a sitting posture, which was a practice of the most remote antiquity, and is supposed to have been adopted from Jacob's gathering up his feet into the bed, as mentioned in Genesis xl ix. 33. This mode of burial has also been practised by the Caraib Indians of North America from time immemorial. But perhaps the most satisfactory conclusion, as to the period of the interment, may be drawn from a careful inspection of the earthen vessels deposited with the body.

The pottery of the Ancient Britons was bare in its material, and rude in its manufacture, formed before the use of the lathe was known,

and imperfectly baked in the sun ; more elegant shapes, glazing, and ornaments, were introduced by Roman art. That these were not sepulchral or funeral urns, is clear, as well from their shape as the consideration that those were used only to contain the ashes of the body after cremation. These were in all probability domestic utensils, and were placed with the body to contain food and drink for the dead ; that with a handle (Fig. 2) was without doubt the ordinary drinking-cup of the deceased.

The spot where these relics were found is in the immediate vicinity of many interesting British and Roman remains, and the surrounding hills show numerous lines of those ancient enclosures which Dr. Stukeley ascribed to the early Britons. Upon the whole, I think we may reasonably conclude that this deposit may be referred to as early a period as any recorded discovery of a similar nature in this country.

Yours, etc. J. D.

Barrows opened in Dorsetshire.

[1836, Part I., pp. 365-369.]

As your pages are at all times open to subjects relating to "heath antiquity," I am induced to forward the results of a few days spent in conjunction with two friends (Messrs. Chas. Hall, and G. A. Ellis, author of the "History of Weymouth"), in examining some of the numerous tumuli with which the hills on the coast of Dorset (particularly in the vicinity of Weymouth) are covered, and where the researches were carried on. The operations were first commenced on the Upway Downs, where a small barrow was cut through from east to west. Immediately under the surface fragments of calcined bones and very coarse pottery were found ; at the base, and under the level of the adjoining ground, imbedded in the chalk, was a skeleton lying on its back, due east and west.

The next were two small ones (or rather a twin barrow).

" Still side by side the verdant mounds appear,
And tell that mighty men lie buried there."

Apollonius Rhodius, Lib. 2.

The first, on being cut through, presented similar small fragments of pottery and bones, with charcoal, and a few feet in front of the side, a cist cut in the chalk, which was filled with ashes and bones. The second appeared to have a fresh cap. Within a few feet of the surface was a skeleton lying in the same position as that in the first barrow opened ; here also the same appearances as regards pottery and bones presented themselves.

A Druid barrow (why so called I am at a loss to conjecture) was next chosen ; the diameter of the fosse and vallum was about 50 feet, the tumulus (a very small one) being placed in the centre ; on re-

moving the surface, fragments of the same description of pottery, with bones, were seen ; under a flat stone, about 3 feet from the surface (the tumulus itself not being more than 4 feet) was an urn, composed of the coarsest materials placed *invertedly* ; it was about half filled with calcined bones, and had three or four thin flat stones placed within, apparently for the purpose of retaining the contents in its proper place. In another Druid barrow (the fosse and vallum 60 feet in diameter) were nothing but fragments of precisely the same description. Here the excavations for the day were terminated ; the fragments of pottery were all of the same kind, sun-dried, and of the coarsest material.

The first tumulus opened on the succeeding day was quite small, and a section being made through it from east to west, offered nothing to notice but fragments of pottery and bones, similar to those of the preceding.

The next was a barrow of considerable size : this was selected on account of its being more pointed in its formation than any other on the ridge of hills, and might be appropriately termed a cone barrow.

“ And high they rear’d the mound.”

The composition and order of its strata was, first : the bed or base of hard close chalk, then earth plentifully mixed with charcoal ; on this a thick coating of particularly loose rubble-like chalk, then earth slightly interspersed with charcoal, and on this a thin layer of chalk, finally covered with the sward. The opening of this tumulus commenced at its base on the east side ; after excavating a shaft of about 6 feet, an urn was discovered in the stratum of earth above the rubble-like chalk, placed with its mouth uppermost, reclining towards the east, and partly filled with calcined bones ; the greatest care was taken, and a fire having been made around it immediately on removal, it has been preserved entire ; its dimensions are in height 14 inches, diameter at the top 9 inches, ditto middle 11 inches, ditto base 6 inches ; immediately under the urn at the base, the skeleton of a dog was exhumed, the skull of which was quite perfect, with the teeth firmly fixed in the sockets. On the excavation approaching the centre, under the superstratum of chalk, a mass, full 3 feet deep and 4 feet diameter, of black and red ashes, was presented to view ; upon the removal of which was found a very considerable quantity of bones, but too much calcined to admit of anatomical appropriation ; under these, in the chalk which formed the base, was a cist filled with burnt remains. This tumulus I should conceive to have been raised over some chieftain famed for his exploits in the chase, his favourite hound being placed with him, and the extraordinary quantity of ashes, that of a hecatomb immolated to his manes.

The site of the third day’s proceedings was an abrupt insulated hill

called Chisbury. This hill bears strong traces of human occupation, probably those of a British settlement ; it has a shallow fosse and low vallum (in some parts composed of stones), extending round its sides, and is further strengthened by several natural terraces ; at its base a beautifully formed and singularly perfect fosse is drawn for a considerable distance ; this is evidently the work of a subsequent period. The summit, which occupies an area of several acres, is covered with numerous circles and hollows, which are plainly and easily traced on the turf. Here are two tumuli of low and irregular formation, with portions of stone protruding through the surface, and of which, on opening one, it was found to be composed ; on digging some way in, an urn was discovered, of very coarse materials, and filled with bones ; it was too much decomposed to admit of removal ; many fragments of pottery and bones were also shown. Beyond these, and about the centre of the tumulus, a large congeries of bones, of some very minute animal, was discovered, a quantity of teeth of a comparative size being interspersed : nothing more was here elicited.*

The next barrow opened was situated on Osmington Down ; it was of considerable size. On a section being made through it, when about one third way in, a large urn (full 16 inches diameter at the mouth) was discovered, placed invertedly, but crushed by the superincumbent earth ; on removal it was found to have covered another of a particularly small size, not more than 3 inches in height, and 2 inches in diameter ; this was removed quite safe, and is in fine preservation ; it contained a few calcined bones ; we found nothing more material.

Another tumulus, in the immediate vicinity, was then commenced. On the summit, within 6 inches of the surface, a skeleton was discovered lying on its side (east and west), with the head bent down, apparently as if the grave had not been of sufficient length ; at the head was a flat stone placed edgewise, with another similarly fixed opposite the face. On digging down, many large stones and flints were met with ; under these was another skeleton, placed apparently in a *sitting position*. The excavation was continued under these remains. On a level with the bed of the barrow was a flat stone, which, on removal, was found covering an urn filled with bones and ashes : it was composed of finer materials, and of superior manufac-

* These mice had perhaps been attracted to the spot from some grain or meal (*mola*), the literal immolation, having been deposited there when the funeral sacrifice was performed. These little animals had established their burrows on the spot, and had sunk during a hard winter into the long slumber of mortality. We know that the excavations of a tumulus lately in the North of England produced, to the surprise of the explorer, nothing but the bones of a mouse. His discoveries in another quarter were, however, much too valuable and important that the force of the fable should apply to him.

— Mons parturient,
Ecce ridiculus mus !

ture to any previously discovered, being ornamented with the chevron moulding. From the situation in which it was placed, a cist of its exact size being cut in the chalk for its reception, it was impossible to remove it entire. That this tumulus was of later formation than any of those previously opened, is clearly evidenced by the superior finish of the urn contained in it, which was the primary interment and cause of the erection of the tumulus ; the skeletons found above being added at a more subsequent period.

The operations were continued on the following day in the same neighbourhood. The first barrow opened was found to be composed of gravel, large rough stones, and flints. At the east side, at some distance inwards, placed between masses of stone, we discovered an urn of very coarse materials, crushed by the stones with which it was surrounded. Still progressing, we arrived at the base of the tumulus ; here was a circle 10 feet in diameter, formed by small flat stones placed edgewise ; in the centre, in a cist cut in the chalk, was an urn of similar formation to the one discovered above ; nothing more was met with.

A barrow, situated by itself on Poxwell Down was then chosen, with which the exhumations should be terminated. On account of its being of a small size, it was resolved to remove it entirely, in sections of 2 feet : the work was accordingly begun on the east side ; before the whole of the first section was removed, two urns were met with and unfortunately destroyed. Having taken sufficient indicia to enable the presence of deposits to be pretty correctly ascertained, and in some measure profiting by misfortune, greater care was taken in removing the soil. In this line were three urns, two of which were preserved entire ; the other crumbled to pieces on exposure to the atmosphere. In the next course an urn was unfortunately broken, from its being placed at the extreme edge of the tumulus, and not above 4 inches from the surface. In this section, but further in, was another urn, which was safely removed. By this time about half of the soil had been displaced ; when, about the centre of the barrow, an urn presented itself, quite different from the others, being of fine materials, baked instead of sun-dried, larger and of handsomer shape, being, in addition, ornamented with a chevron moulding.* Notwithstanding the greatest possible care, it crumbled into fragments. On removing the next course, we found an urn (and this the only one) containing bones : this, like the former, came to pieces on exposure. We then proceeded to displace the remainder of the tumulus, but nothing further was discovered. This last was, as regards the con-

* The chevron, or zigzag, appears to have been a favourite ornament in early Egyptian and Grecian remains, and on the primitive remains of the Western Hemisphere. It may not be generally known, that urns have been found in tumuli in Mexico (and from the nature of the ware in the highest preservation), with precisely the same description of ornament.

tents, the most abundant. I should myself consider it to have been exclusively the sepulchral mound of some distinct clan, raised to one of their renowned chieftains, whose remains were deposited in the ornamented urn, and in respect for whom it was held in such estimation as to become the resting-place of many of his clan.

That sepulture in barrows in the primitive ages was almost universal (at least for the chief men), we have many and incontrovertible proofs; and we find tumuli in North and South America devoted to similar purposes as those in this country. It has been clearly proved, from the opening of these tumuli, that they were exclusively devoted to funereal purposes; and from the similarity of deposits we may safely pronounce that the whole of the tumuli on the coast of Dorset are generally alike in their contents, and continuously coeval in their formation, which might be appropriated to the earliest era of barrow burial; as such, no greater proof can be given, than that of the total absence of any substance the produce of the arts, neither sword-blade nor shield, bead nor amulet being discovered. Cremation, which mostly prevailed, being in strict accordance with their mystical religion, that of the adoration of the solar body, as the generator and reviver of nature; the Druidical year commencing at the vernal equinox, when their most solemn feast was held in honour of that luminary, the night preceding which all fires were extinguished, and were rekindled from the sacred fire at the festival. The Beltan feast—"Baaltuine, Belus, or Baal's-fire"—formerly held in some parts of Ireland and Scotland, was evidently a relic of this Druidical festival. Many of their sacrificial and funereal ceremonies were performed at midnight, when darkness had thrown her sable mantle over the face of the earth, and by the contrast contributed to heighten the solemnity of the scene. Can the imagination picture to itself anything more awfully sublime, more calculated to impress the beholders with veneration and submission to their religion, and respect for the ceremony, than the body of a departed chieftain placed on the funereal pile, around which are the officiating priests performing the procession of the deasuil* and other mysterious rites of their religion:

" And thrice with pious hands they heap'd the ground,
And compass'd thrice in arms the rising mound."

Apol. Rhod. Lib. 4.

Then the coronach chaunted by the bards, in which they recite the noble descent of the departed hero, his prowess in the battle-field, his skill in the chase, and his feats at the banquet; then the chief mourner applying the torch, dense clouds of white smoke rolling in majestic sullenness to the heavens, succeeded by volumes of red flame, which cast an unearthly reflection on the white-robed priests and skin-clad warriors attendant on the ceremony. On a sudden the

* Or deisol. That procession of the Druid rites performed in imitation of the sun's course from east to west, in a circle.

neighbouring hills answer the signal, and the horizon becomes one continuous illumination from the watch fires of the surrounding clans, vying with each other in veneration for their religion, respect and honour for a departed chieftain, and in every way proclaiming it an offering worthy the manes of a Celtic hero.

The principal of the deposits being found on the east side of the tumuli, is confirmatory of their worship of the solar body, being placed on that side which first met his reviving beams on emerging from the horizon. . . . We find in Herodotus, *Melpomene*, xxxiii., that they, the Hyperboreans (clearly the Celts), continually sent sacred offerings to the Temple of Apollo, at Delos, where they were held in high estimation.

"The Celtic sages a tradition hold,
That every drop of amber was a tear
Shed by Apollo, when he fled from heaven ;
For sorely did he weep, and sorrowing pass'd
Thro' many a doleful region, 'till he reached
The sacred Hyperboreans."—*Apol. Rhod.*

Yours, etc. CHAS. WARNE.

Celtic Remains in Kent.

[1863, Part I., pp. 636-638.]

A watery sky, a cutting wind, and muddy roads, are not incentives to tempt the gentle archæologists of England to pursue investigations into the customs of the aborigines of this island; nevertheless on Saturday last, any one more intent on his neighbour's business than his own would, at the Strood station, have been struck with the determined aspect of three individuals, who with sticks and umbrellas took their railway tickets for Snodland, a station on the North Kent line half way to Maidstone.

It was, then, on this day my good fortune, with Mr. Roach Smith as pioneer, to accompany our friend Mr. Charles Warne to view some Celtic remains in Addington Park and at Coldrum. We had a delightful walk through the villages of Birling and Ryarsh to Addington, where, despite the rain, we arrived at one o'clock. In summer this must be a lovely walk, and in winter time it is not wanting in scenery. After a cheery lunch at a Royal Hotel, we went to Addington Park, the ground of which is very undulating. On entering you see before you an elevation, but whether natural or artificial is doubtful. Mr. Warne is inclined to the belief of its being natural, and being an authority on such points, his opinion should be final; but probably a moderate outlay in excavation would be more conclusive, as the angle of elevation on one side appears to be a little too sharp to be in accordance with natural causes. Be this, however, as it may, on this elevation were the remains

of a cromlech, consisting of two or three upright stones in such position as to form part of the head of a man-shaped cromlech ; close by was a huge stone, horizontal, which had been thrown out of position, and was most probably the head capstone. At a distance of ten or twelve yards from the head were other stones, of smaller bulk, grouped so as to form what I take to be the foot of the cromlech ; outside, on the decline of the rise, which certainly appeared to have a circular figure, were other large stones ; but whether in the destruction of the cromlech they had from wantonness been rolled there, or formed part of a circle, there was not sufficient evidence to show, for they do not appear numerous enough to warrant the latter conclusion, nor can we suppose that, having been taken up for an ulterior purpose, they would have been conveyed so short a distance and then set down.

Two hundred yards furtheron, and to the right, is a second cromlech. It may be called a perfect one ; but it is only perfect in so far as from its present appearance its original form can be predicated. Here, unlike the last, an imposing mass of stones presents itself for examination. In the first place we observe three large capstones shelved one within the other, like half-pence inclined at an angle of 80° ; secondly, around and beneath smaller masses of stone ; thirdly, odd blocks horizontal, some few yards in rear of these : and I have no doubt that more would now remain (if they do not in fact remain beneath the soil), had they been of less convenient size to cart away. That this was an oblong or man-shaped cromlech, such as we see in Jersey and Guernsey, I feel convinced, and its present appearance has arisen somewhat in the following manner :—The three capstones originally rested on the smaller blocks, now around and beneath, then upright ; but that from some cause these latter having given way within and without their original setting, these capstone masses have gradually slid down one within the other as we now see them ; and that the odd blocks in rear indicate the remains of a continuance of the chamber, similar to that on L'Ancrelle Common in Guernsey, etc.

There is another circumstance which deserves attention, and that is the nature of the soil, which is sandy ; this may account for finding so few stones upright, and also for so few stones being visible ; consequently, if judicious excavations were undertaken, probably a more certain indication of the form of these cromlechs would be made manifest, besides obtaining any relics that may still be preserved for us.

The cromlech at L'Ancrelle in Guernsey is situated close to the sea-shore, and being completely exposed to the influence of the sea-breezes, there is no wonder at its being so thoroughly embedded in sand as it was, till exposed a few years ago ; but at Addington we lack the constant sea-breezes, and cannot suppose that two or three thousand years should make no difference in the consolidation of

sand-soil, so liable to be shifted by wind or moved by human agency : and therefore I conclude that the light soil continued to be blown about by the wind till forest-trees arose and vegetation gradually crept up, putting a stop to further accumulation ; and to this cause we are probably indebted for its present appearance.

From Addington Park we pursued our way through a silent wood to Coldrum, accessible also by the carriage-road. To those who in summer-time desire to combine their recreations, there will be ample opportunity for increasing entomological and botanical collections ; nor need more delicate feet hesitate to follow a path strewn with the beauties of nature.

The Celtic remains at Coldrum are essentially different from those in Addington Park : they are situated on the top of rising ground, cut away in part to form the road by which you approach, and further excavated for chalk, by which one of the finest Celtic remains in Kent has been almost destroyed. The difference in level between the rising ground and road is about 25 feet, so that two large stones are on the edge of a precipice. The remains at present consist of about 17 stones in a horizontal position in oval form, though I doubt not, when these stones were upright, the form was circular. Mr. Warne conjectured that the present shape has resulted from the decline of the stones within and without the original setting. They are partially covered with earth. The stones of this oval approach close to the edge of the quarry, and at one point two large blocks of stone set on edge, and as if forming two of the stones of a chamber, project over the precipice : they are almost parallel, and, on a rough measurement, are about 3 yards long, $1\frac{1}{2}$ yards deep, and 2 feet thick : at their inner end and next the circle, a space of about $3\frac{1}{2}$ feet is blocked up by a foot-stone ; the overhanging ends towards the road are 5 feet apart. In the quarry below are fourteen huge blocks of stone—one triangular, more than 8 feet long, and well calculated to form a capstone, some square, but the majority oblong.

From the shape of these stones and the position of the two large blocks already spoken of, I infer that this cairn has been of superior construction to those I have before noticed, and has been built of oblong blocks fitted together and covered by capstones, and not built, as I have elsewhere seen, of triangular uprights overlaid by triangular blocks—two triangular blocks making together a parallelogram—having, in fact, a more coffin-shaped appearance.

Comparing these cromlechs with those I saw last year in Jersey and Guernsey, they do not appear to differ in construction, but only in the size of the blocks of stone ; and probably the Channel Islands cairns owe their preservation to the abundance of the material and a limited population, whereas the very reverse obtains here. I have called them man-shaped cromlechs, as I conceive that their form was suggested by the human figure.

There is something very grand in the contemplation of these vast masses of stone, reared by the pious industry of our ruder yet more elegant-minded forefathers over the remains of what they ever held dear to them, certainly a vast deal better than that repugnant-looking black box we would-be-civilised thrust our lifeless remains into, and on a par with the disgusting emblem of death the Middle Ages gave us!

I am, etc. CHARLES MOORE JESSOP.

Yorkshire Tumuli.

[1866, *Part I.*, pp. 493, 494.]

The Rev. W. Greenwell, of Durham, who has announced for publication a work upon the British period, "A Decade of Skulls from Ancient Northumbria" [see Note 11], has spent several days in the examination of the group of tumuli near Gardham, on the Cherry Burton Wolds, about midway between Beverley and Market Weighton. The group consisted of eight round barrows, six of which were in a line running east and west, and were from 5 to 50 yards apart; the other two were about 100 yards to the north, of themselves situate east and west, and about 60 yards apart. The results from these examinations are of much interest, showing the two practices of cremation and inhumation to have been in use at the particular British period marked by these burials. The excavations were commenced on the tumulus to the extreme east, which was 49 feet in diameter, and much lowered by ploughing. In the centre, 5 feet below the surface, in an oval hollow in the natural chalk, sunk a foot deep, a full-grown, unburnt male body, of fifty years, was found, laid on the left side, with the head to the south-east. The body was doubled up, the knees being drawn up to the elbows, and the hands to the chin. The body was that of a robust man, the skull being sadly broken and decayed, but which was carefully gathered up and well rebuilt, so as to show the type. There was a great amount of burnt matter near the body; but no implements or urn appear to have been buried with it. The second tumulus was of 46 feet diameter. Near the centre, but 7 feet apart, it contained two reversed cinerary urns, each containing the remains of a burnt body. The urns were east-north-east by west-south-west. The eastern urn contained the body of a young child, probably not a year old; the other that of a full-grown person. Excepting the rims, the urns were much damaged by the plough. A few large chalk-flints had been placed round each urn as a protection. These burials were both of a secondary nature, and were placed in the barrow above $2\frac{1}{2}$ feet above the natural surface. Upon the natural surface a portion of a skull of an unburnt body was found, but nothing more remained; and close by, in a hollow sunk $1\frac{1}{2}$ feet into the chalk, the primary burial—a reversed urn, containing the burnt bones of a young person—was

found surrounded by burnt earth and charcoal. The urn, from the wet nature of the ground, was very much decayed. All the three urns found in this tumulus were of the ordinary British cinerary type, with overhanging rims, and ornamented with reticulated and herring-bone impressions of twisted thong. A few pieces of red-deer horn were found mixed with the materials of the bone.

The third tumulus examined was 36 feet in diameter, and reduced by ploughing to $2\frac{1}{2}$ feet altitude, the same process having destroyed its contents entirely, barring the action of the elements. The fourth tumulus was of 20 feet diameter, and about 2 feet high, the plough having again much reduced the height. In a slight hollow sunk into the natural chalk rock, the remains of a burnt body were found, without urn or any accompaniment. The cremation and interment had evidently taken place on the spot. The fifth and sixth barrows were each 38 feet diameter, and each $2\frac{1}{2}$ feet high, the contents of both having been destroyed by cultivation. The seventh barrow, one of those to the north, was of 46 feet diameter and 3 feet high, and among the materials two fragments of an urn, which, with its contents, had been destroyed by the plough, were found. The singular feature of this tumulus was, that almost throughout its whole area, and just above the natural surface, a hard bed of fused flints was met with, which was broken up with difficulty, and presented the appearance of broken clinkers. Beneath this vitreous platform, and about the centre of the barrow, there was much burnt matter, along with charcoal, and in a circular hollow in the chalk the remains of the burnt body were deposited. The eighth tumulus was not opened. It is a most singular feature that in the barrows examined not a single flint implement or portion of flint, burnt or unburnt, was found; nor, urns excepted, any article which had been deposited with reference to any of the interments.

The last examination was in a field adjoining the new line of railway from Beverley to Market Weighton, where, when the line was formed, the railway company removed upwards of fifty bodies, all unburnt and doubled up, which had been interred in hollows in the gravel varying from 1 foot to 3 feet deep — in this case inhumation without burial mounds. Mr. Greenwell devoted one day to researches in this British cemetery, and found one interment. This was of a man about fifty years of age, the body being doubled and placed in a hollow $1\frac{1}{2}$ feet below the surface, with the head to east-south-east. The body was on the right side, with the legs up, the left arm crossed over the chest, and the right extended. A small semi-circular piece of greatly decayed bronze was found near the hip, but it is doubtful if associated with the body. It is not possible to tell what the bronze has been. The stature of the man had been 5 feet 8 inches to 5 feet 9 inches, and the skull was broken into 73 pieces,

but Mr. Greenwell does not despair of re-erecting it and ascertaining the type and race. The vicinity is a very rich one in British sepulchral remains, of which, at various times, much destruction has occurred. In the rectory yard at Dalton, ten bodies were found arranged in a circle under a tumulus, all doubled up in the British fashion. These were re-interred in a large hole made to receive the bones removed when rebuilding the chancel of the church ; and, worse than this, but a few weeks ago Ancient Britons, found accidentally, were reinterred in graves dug for animals dead of the rinderpest. Mr. Greenwell heard of many cases where tumuli had been destroyed.

[1867, *Part I.*, pp. 94-95.]

During the past year the Rev. William Greenwell has been prosecuting, with much success, his excavations in the tumuli of the Yorkshire Wolds. Nothing can be more satisfactory than the manner in which Mr. Greenwell conducts his researches ; and, consequently, the enormous mass of facts which he has accumulated will become, when printed and illustrated, of high value, and will probably lead to certain modifications in classifications, which, as they at present appear, can only be considered as provisional. Past generations, with all their enthusiasm, neglected much of what should be the chief consideration of the antiquary, namely, scrupulous attention to facts of all kinds connected with the subjects of their study, while at the same time they were ever running off to all sorts of speculations and theories which often perfectly distracted their readers, and left the really useful evidence confused and inextricable. On the contrary, Mr. Greenwell is cautious in generalising. "In a few years," he observed, after delivering a lecture at York, based upon his excavations, "he looked forward to such careful examinations being made as would throw much additional light on the subject of his lecture." He added : "On the Wolds the barrows were disappearing under the course of cultivation, and in a few years there would be no remains of burial mounds there. Several had been destroyed (many it is to be feared) from careless and reckless opening by mere curiosity-hunters."

Mr. Greenwell remarks, that in the Wold district and in other places in the north, there are numerous ancient fortresses and lines of defence, some of which are of great extent, and their purpose it was not easy to understand, on account of the vast army that would be required to hold them. I have on several occasions ventured also to question the soundness of the common belief that these earthworks were ever intended for military purposes ; it is, at a glance, evident they never could be held against an enemy except by an immense force ; and then comes the question, what could have been the object of such lines of defence in these particular districts ? To me they seem to have been boundaries of land, and in this point of view they

are perfectly intelligible. It may scarcely be necessary to point out to Mr. Greenwell and his colleagues the excellent work of Drs. Davis and Thurnam, on the skulls of the aboriginal and early inhabitants of the British Islands ("Crania Britannica"), for it has become indispensable to all engaged in such researches. It may here be remarked that in the museum at York are a considerable number of funereal urns, labelled "from the Yorkshire Wolds," among which are many Romano-British, and Saxon; and some of the latter, if I mistake not, contain burnt bones.

C. ROACH SMITH.

[1867, Part I., pp. 792-794.]

The following is the substance of Canon Greenwell's last excavations in tumuli of the Yorkshire Wolds as communicated to the *Times*. They were made on the estates of Sir Charles Legard, of Ganton Hall. "The first barrow opened was of 94 feet diameter, and 3 feet high, formed of chalk and clay. At 19 feet south-south-west of the centre, and 1 foot above natural ground, a burnt body was found to have been inserted, the bones being placed in a heap about 9 inches diameter, and on the west side, and upon them was an 'incense cup,' of the usual type. At the centre of the barrow an unburnt body was found on the natural surface, laid on the left side, with head to west-north-west. Beneath the shoulder blade was a fine large, long flint scraper, and large native blocks of flint were piled around, under and over the body, as protection. About 5 feet to the east was the unburnt body of a child, laid on the right side, with head to west. All along the back, and partly surrounding and covering the bones, were the calcined fragments of another body, which had apparently been scattered over the unburnt child. Touching the head of the last body was the face of another, laid on its left side, with head to east-north-east. The right hand was out from the side at right angles, and held the head of another child, the left hand being up to the breast. Behind the back of the full-grown body was the detached jaw of a young person, no other bones being there. About 1 foot east of the burnt bones was the body of a very young person on the right side, with head to the north, and before the face—in fact, touching the teeth—was a most beautifully chipped thin flint barbed arrow-head. About 3 yards north-west of the centre, a body was found on the natural surface, of which little save pieces of skull remained. In front of the face was a 'cinerary' urn, or an urn of the shape usually found containing burnt bodies. This was a combination of cremation pottery with an inhumed body, of which only one instance has before been found, namely, in the great tumulus on Langton Wold, Malton, opened in 1865. The whole of the bodies in this barrow were contracted or 'doubled up,' and their condition was bad,

from the moisture retained by the clay. A peculiar chalk wall ran across the houe east and west, the purpose of which was not at all apparent. The second barrow was 100 feet diameter, and 4 feet high, and was formed of sand and clay, with chalk rubble. Just south of the centre, on the natural surface, was a burnt body, the bones forming a heap of $1\frac{1}{2}$ feet diameter. In the centre was an oval grave, formed in the natural rock, 2 feet 3 inches deep, 4 feet by 3 feet 6 inches in diameter, formed east and west. At the west end of this grave five stake-holes were found, of which casts were taken in plaster-of-Paris. These were 10 inches deep on the average, and showed that the stakes had been of wood, and round, but pointed in the modern way, thus showing that the Britons had the means of sharpening in a clean angular manner the timber stakes used. At the eastern end of this grave or cist were six stake-holes of a precisely similar kind. At the bottom of the cist was black matter, as if of decayed wooden planks, and the same appearances were behind the stakes; indeed, the clay retained impressions of wood. In the grave was an unburnt body laid on the right side, the head being to the north-west, and quite up to the stakes. The body was doubled up, and very decayed. Just in front of the face was a globular-shaped urn, on its side, with the mouth to the head of the skeleton. The stake holes of the wooden cist averaged about $2\frac{7}{8}$ inches in diameter. Among the materials of the houe were four round and one long flint scrapers, and a flint javelin head, beautifully chipped. The third houe was 40 feet diameter, and 1 foot high, formed of chalk rubble. Just south of the centre was an urn, with much burnt earth around it, and among the earth a few very imperfectly burnt bones were scattered. At the centre an oval grave was found dug into the chalk, $1\frac{1}{2}$ feet deep, and 4 feet by 3 feet. In this was a body, evidently a female, laid on the left side, knees drawn up to elbows, and head to west-south-west. The left hand was under the head, and the right rested on the knees. Before the face the bone pin of the headdress had fallen. In filling up this grave after the burial fragments of another burnt body had been mixed with the soil. Generally the graves examined have been so wet, and the remains so near the top, that the skeletons have been in a wretched state. The skulls, being generally protected, are best, and most of them will rebuild and show type. Investigations are proceeding in barrows which show a mixture of late Anglo-Saxon with early British interments, several fine bronze fibulae, and other Anglo-Saxon relics having been met with. Of these openings the details are not ready.

"Canon Greenwell has likewise excavated the large tumulus so conspicuous on the Duggleby Wold summit, upon the estates of Mr. T. W. Rivis, of Newstead House, Malton. The results have been very peculiar. The houe was a very large one, being 28 yards in diameter, and 7 feet high. Ten yards south of the centre a large

square grave was found, dug into the natural chalk, measuring 5 feet by 3 feet, and 2 feet deep. The corners were rounded, not angular. So far as could be discovered, this grave was unused. In line with the centre, but four yards south of it, was another unused grave, circular in form, and 2 feet 6 inches in diameter by 1 foot 6 inches deep. At the centre were three small mounds of chalk gravel running east and west, and, taken in relation to the empty graves, forming the letter T. These mounds were circular and flat-topped, the diameter at the base being 4 feet, and on the top 2 feet 6 inches, and the height 1 foot 6 inches. The eastern and western mounds were about 2 feet distant from the central one, and had nothing either upon or below them. The central mound, however, was covered with a layer of charcoal about an inch thick, upon which was a greatly decayed human skeleton, laid upon the right side in the doubled-up British fashion. The head was to the west, and had been protected by four wooden stakes driven down about ten inches. The holes in the clay were quite distinct, and could be measured. The stakes varied in thickness from 2 inches to 1½ inches diameter, and had been sharpened by a clean-cutting instrument. This is only the second time stake-holes have been detected. Three out of the four stakes were angular. With the body were buried one long flint flake, two 'thumb flints,' three rubbed sea-pebbles, and some flint chippings. These were laid about the hips. On the east of the burial, among the soil, were detached potsherds and some stray flints, one a scraper. The large mound was composed entirely of layers of loamy earth and burnt matter, and was totally devoid of stone. In the materials of the mound, carelessly thrown in, were found a finely worked flint-flake knife and other implements of flint."

[1867, *Part II.*, pp. 651-653.]

The excavations now being carried on by Canon Greenwell and his friends have already been the means of accumulating an abundant mass of facts, which will eventually contribute to a better classification and understanding of the sepulchral remains on the wolds, which belong to, at least, three different epochs.

Near Weaverthorpe, on the northern range of hills stretching from Malton to Filey, the discoveries made are of somewhat unusual interest, and are thus described:—1. The tumulus contained the skeleton of a female, laid on the left side with head to north-east, with the hands up to the head. The body was doubled up. Upon the right wrist was a beautiful bronze armlet, of the "snake-head" pattern—a succession of oval swellings lengthwise—and quite perfect. Close to the neck was a delicate bronze fibula, of the bow shape, extremely elegant in workmanship, which had originally had a tongue of the same metal. This had been broken off, and replaced by an iron tongue, fixed in a piece of wood which passed through the bronze

coil of the fibula. On the chest was a necklace of beads, fifty-three being of glass and seventeen of amber. The glass beads were most beautiful; they were all blue in colour, and ornamented (with one exception) with a zigzag pattern in white enamel. The exceptional one was larger and more globular in form, and was ornamented with amulets of white—identical with the glass beads of the well-known Arras find in 1817. In the mound were some potsherds, and a few flint chippings. 2. This barrow contained the skeleton of a female, with head to the north, laid on her left side, with hands up to the face, and body doubled up into the least possible space, being from head to feet only 35 inches. On the right wrist, in this case, too, was a perfect bronze armlet of the most beautiful description, resembling a delicately formed cog-wheel, with rounded teeth on both sides, the rim between the teeth being ornamented by three grooved lines. For exquisite preservation, delicacy and beauty of workmanship, high polish, and brilliant patina, this armlet is not to be surpassed. This was similar to the Arras finds, except in being more delicate. The skull was remarkably thick and strong, while the other bones were very light and slender. Below the hip were the remains of a plain urn of a peculiar dark-coloured ware. Under the body and quite to the left of it, formed east and west, was a hole or trench, 7 feet by 4 feet and 2 feet deep, containing flint chippings, animal bones and charcoal, and numerous parts of a dark urn spread about. Among the bones was the core of an ox's horn, which had been clean cut from the head. 3. In this was a doubled-up body on the right side, the head to the south-south-west, the right hand under the head, the left on the hip. At the feet were much charcoal, several fragments of pottery, and a few flint chippings. The fourth barrow was 32 feet diameter, and 2 feet high. At the centre, on the surface, was a body on the left side, with head to the north-east. The right arm down by the side, the fingers touching the knee, hand flat, the left arm extended from the elbow, hand also flat, and both with the palms upwards. Six inches below the body were many fragments of a peculiarly plain, dark urn. Four feet south-east of the centre was a hollow, 3 feet by 2 feet, and 18 inches deep, which contained much burnt matter, parts of urn, a thumb flint, and several flakes. 4. Four feet to the west was a similar but larger hole, filled with a black carbonaceous matter, the sides being calcined to a dark red colour. 5. In the centre was a skeleton lying on the left side, contracted, the head to the south-east, the right hand up to the head, and left on the chest. A great quantity of charcoal was about the body. To inter this body a burnt burial and an unburnt body of a child had been disturbed, pieces of burnt bone and a child's lower jaw being close to the intruding burial. Above the body were parts of a highly ornate "drinking-cup" and portions of cinerary urn. 6. The sixth barrow contained two skeletons, doubled up; between their heads a small urn. As has

often been observed elsewhere, this barrow contained a considerable quantity of black unctuous matter as well as a few animal bones. At the centre was a body on the left side, with head to north, and both hands upon the knees. There were one potsherd and some animal bones ; among them the tine of a red deer rubbed down into a pointed implement.

This group of barrows has been compared for a close resemblance in the leading features to those near Arras, by Market Weighton, excavated in 1817, and subsequently by the Rev. E. W. Stillingfleet and Mr. Clarkson. They are probably of the first century of our era, the ornaments showing the influence of Roman art and fashion.

A large tumulus in the Mid-Wold range of East Yorkshire was next examined. It had contained upwards of twenty interments. This tumulus was 56 feet in diameter, and 6 feet in length. A foot below the surface was found a large bronze rivet which probably had belonged to a dagger, the middle portion of which was found near the centre at about the same depth. This dagger has been a large, strong, and beautifully made weapon, with central and side ridges running to the point. This was, however, altogether unassociated with any of the burials, which were at a much greater depth, and presented an extraordinary line of bodies, buried in a great measure on a stone pavement, and, although laid in all possible positions, yet forming a line of regular interments. The bodies, many of them at least, had been disturbed since burial : a sort of rude order had been observed in their re-interment, the bones having been placed in position, but in many cases wrong end first. A great number of peculiar features were met with in pottery, implements, and flints, carelessly thrown in, for the most part, among the materials forming the grave mound. Among these were a stone-pounder, hammer, or rubber, extensively "used" at one end ; a very remarkable square (cube) flint, all rubbed on the edges ; a long piercing implement of flint, twelve "thumb" flints, two flint arrow-heads of the leaf shape—one an exquisite specimen ; enormous quantities of potsherds of a peculiar plain black ware ; part of a cinerary urn and portions of a drinking cup ; two handles of small urns, lying together, but no urns near ; a very great number of flint flakes and chippings, and several rounded stones, rubbed flat on one surface ; one extraordinary stone utensil or implement, most like a cobbler's lapstone, rubbed very smooth, and over a foot long ; a great quantity of animals' bones, broken for the extraction of marrow, and among them the teeth of the ox and the red deer in great numbers. In addition to these were, in association with bodies, a sickle-shaped bone implement made from a very long tusk of the boar, split and ground, and a hammer with a square hole made from the base of a red deer's antler. These were as fresh (after drying) as on the day of manu-

facture. Of the seventeen bodies traced three perfect skulls show the long-headed type of a smallish people, supposed to be of the earliest date, and hitherto found buried with a peculiarly plain black pottery, and also with the arrow-head known as the "willow leaf" shape—a very delicate and highly-enamelled flint weapon.

[1868, *Part I.*, p. 84.]

The Yorkshire Wold tumuli during the Rev. W. Greenwell's last excavations for the winter season, have furnished nothing particularly novel, but the repetitions of facts in scientific inquiries are valuable; and Mr. Greenwell has now collected materials enough to enable him to place the results of his successful labours before the public, with the additional advantage of diagrams and engravings [see Note 12].

The estate of Lord Londesborough at Willerby was the site of the most recent excavations. The first tumulus opened, 68 feet in diameter, and $3\frac{1}{2}$ feet high, was formed of earth; pieces of flint, potsherds, and charcoal being mixed with the earth of the mound. Over the centre was about one-third of a plain urn, in a rabbit-hole, the rabbits in borrowing having doubtless disturbed the burial, if a cremated one. At the centre was an oval grave, made east and west, 6 feet by 5 feet, and 2 feet 3 inches deep. At the west end was a body, as usual, doubled up. Before the face was a fine urn with four pierced ears, entirely covered with herring-bone work, the markings being made in the clay by a pointed stick or other implement. Behind the skull of the skeleton were two flint knives, and four un-worked flints, forming a circle round the head. Clay was deposited over the grave.

The second barrow, 45 feet in diameter, and 2 feet high, was formed of soil and chalk rubble. Among the materials were many worked flints and potsherds; among the flints was a fine long flake, much used, as if with scraping. At 8 feet east of the centre was a deposit of four bodies upon the natural surface. The bodies were those of an adult (believed to be a woman); and three children, from three to ten years of age. Apparently all four had been interred at the same time. Nothing whatever was buried with them. At the centre of the barrow was a large grave 5 feet diameter and 4 feet deep. In it was the body of a strongly made young man of about twenty-five years, the skull almost perfect. The body was on the left side, in the doubled-up position, with the head to the north-west, the left hand up to the face, and the right hand on the breast. The bottom of this grave was a solid floor of chalk, and upon that solid floor was a carefully arranged pavement of slabs of chalk, on which the body had been laid. The burial had been covered with turf, and the rest of the grave filled in with chalk. This burial was not the original one in the centre. The filling in of the grave revealed fragments of human

bones which had been disturbed to introduce the central but later interment. Indeed, numerous examples of disturbed bodies, for after-interments, have now been noticed in the Wold barrows. The Rev. Canon Greenwell will open the tumuli on the estates of Sir Tatton Sykes, at Linton, and of Mr. T. W. Revis, D.L., at Duggleby; and subsequently in this month those on the Moor estates of Lord Feversham, in North Yorkshire.

Miscellaneous Excavations.

BIGGLESWADE, BEDFORD.

[1823, Part II., p. 269.]

As some workmen in the employ of John Day, Esq., were lately digging the foundation of a farm-house near Biggleswade, County Bedford, they suddenly struck upon something hard, which upon investigation proved to be a helmet of most exquisite workmanship. After the earth had been partially cleared away, they discovered some human bones; this induced them to make further search, and shortly afterwards they turned up a ponderous metallic substance of an oval form, like a shield; a few inches lower they found more human bones, and before night, when the whole was cleared away, they distinctly made out the skeleton of a man and horse; the man appeared to have been clothed in a complete suit of armour, which was nearly perfect, though somewhat disjointed. He appeared to have been of gigantic stature; the sword, which was very ponderous, lay at the feet of the horse. On the following morning, whilst pursuing their occupation, the workmen discovered some other skeletons of men and horses, all standing in an erect position, clothed in armour, and nearly as perfect as the first which was discovered. Mr. Day, with great liberality, is proceeding in a further search, as from the position of the skeleton already found, and the marshy nature of the ground, little doubt is entertained but many more will be found, and that it must have been a whole body of horse which unfortunately fell into some snare of an enemy, and were thus swallowed up [see Note 13].

ROYSTON.

[1856, Part II., p. 625.]

An excavation of remote origin has been recently discovered on Royston Heath, on the summit of a lofty hill near to the old British and Roman Icknield Way, and to a number of British tumuli. The spot in question, before it was opened, presented the form of a hollow oval, surrounded by a very low bank, and flanked on the north-east by a truncated mound, which had the appearance of having been disturbed. A small hillock within the circular bank, but most probably accidental, gave to the place a somewhat Druidical character. The hollow oval lies in a direction north-west and south-

east. Its length is about 31 feet, by a breadth of about 22 feet. Within the bank are two circular excavations, meeting together in the middle, and nearly forming the figure 8. Both excavations descend by concentric and contracting rings to the walls which form the sides of the chambers ; the depth from the surface of the southern excavation being nearly 7 feet, from that of the northern about 5 feet. The southern chamber has an upright wall to the height of nearly 4 feet ; the wall of the northern chamber gradually recedes almost from the floor. A division-wall about 2 feet 6 inches high in the southern chamber, and about 1 foot in the northern chamber, with an opening about 3 feet wide between the shoulders, separates the two chambers. The southern may be compared to an ampulla, with the foot turned inwards ; the northern to an egg, or an ace of spades. The northern chamber is about 7 feet from north to south, by about 6 feet from east to west at the broadest part. A bench runs round it on the west side, about 1 foot high above the floor, by about 1 foot broad, and a similar bench occupies a small portion of the east side also. Various ancient and mediæval relics were found ; but these do not seem to shed any light on the original purpose of the excavation.

BEACON HILL, CARLISLE.

[1789, *Part II.*, p. 663.]

A few days ago, as Mr. Rigg, surgeon in Aspatria, near Carlisle, was superintending some labourers he had employed in levelling an artificial mount, called the Beacon Hill, close behind his house, in that village, they dug into a cavity which contained the skeleton of a man, entire from the crown of the head to the ankle-bone. Across the forehead, or more properly at the head of this gigantic skeleton, was found a sword, the blade of which is remarkably broad, and the whole length—including the handle, which is strongly plated, and ornamented both with gold and silver—is 5 feet. Several pieces of armour were also found, and a dirk, or hanger, the handle of which appears to be highly ornamented and studded with silver. A belt was also dug up, the buckle of which is supposed to be gold ; and a breastplate. The scabbard of the sword is of wood, and has been lined with cloth, a part of which adheres to the rust on the blade. The place in which these remains were found is about 3 yards deep, measuring from the top of the hill, and as many feet below the surface of the ground at its base : the last depth is walled round, and the cavity was covered with large stones, on some of which are inscriptions, not yet understood.

DEVERILL BARROW, DORSET.

[1824, *Part II.*, p. 547.]

Mr. Charles Hall, of Ansty, has published the following interesting account of opening some tumuli or barrows in the county of Dorset :

Two gentlemen, Messrs. Miles and Atkinson, surveying the county of Dorset, have lately opened several of the barrows on Deverill Down, near the turnpike-road between Milbourne St. Andrew and Whitchurch. In one very low and small tumulus they found a perfect human skeleton, more than 6 feet in length; the thigh-bone measured more than 18 inches in length. In another barrow they found a great number of flints, exactly like those recently taken out of a chalk-pit, white on the outside and quite black within: these stones were nicely packed in the form of a cone, over the urns that were inclosed in this barrow. In all the others that were opened urns were found. One very large, high, and circular barrow claims the particular attention of the antiquary. There are twenty-seven stones now all exposed to view, their weight supposed to be from two tons each to half a ton. On the east side stands an upright stone, about 5 feet in height, surrounded by nine others, forming part of a circle. Under each of these stones, in a chamber or hole in the natural chalk, was deposited an urn of extremely rude but curious workmanship: no urn was found under the upright stone, which was supposed to have been the altar, from the circumstance of there being found, at the hole, the bones and teeth of an animal, supposed to have been those of the victim sacrificed. The stones appear to be of a whitish coloured sand, cemented by a natural crystallization. Twenty-five urns were discovered in this barrow, beside two very small ones, which are called drinking-cups: they will contain but little more than half a pint. The urns were all of British or unbaked pottery, varying in size from 6 inches to 20 in height, and from 3 to 11 inches in diameter, some of them thimble-shaped, and others bilge-shaped. Sir Richard Hoare has seen this barrow, which he says is wonderfully interesting to the skilful antiquary, as, in opening two hundred barrows, which Sir Richard has done, he never met with one like this. It is supposed to be the burial-place of a Druid and his family. That it was the burial-place of a family of high rank is certain.

[1826, *Part I.*, p. 352.]

Several fine urns, lately found in Deverill Barrow, in the county of Dorset, have been presented to the Bristol Institution; they constitute rich specimens of the patriarchal customs and funeral rites of the ancient Cimbri.

MUCKLEFORD.

[1832, *Part II.*, p. 165.]

On opening a barrow at Muckleford, near Dorchester, a few days since, a large stone was found under the centre, of a triangular form, convex on the top, and nearly 5 feet from angle to angle. It was of so hard a nature that the tools would make no impression on it. On removing this stone, which was with difficulty effected by six

horses, it was found to be flat at the bottom, and about $2\frac{1}{2}$ feet thick in the middle, decreasing to about 1 foot at the sides. It was supposed to weigh two tons and a half at least. Underneath was a quantity of rubble chalk, in which, at a further depth of about 6 feet, were the bones of a human being, and with them the head of a spear, with three rivets, and also a pin, about 6 inches long, with a double head.

WAREHAM, DORSETSHIRE.

[1838, *Part I.*, p. 303.]

A barrow, crowning the brow of a hill on the wild heath near Wareham, has lately been opened, and found to contain so many as twenty-four urns. In this respect it even exceeds the celebrated Deverill Barrow, opened by William Augustus Miles, Esq., some years since, in this county; although the urns contained in it are of much ruder workmanship and material, bespeaking a far earlier era. In this tumulus the urns were all found at different heights, and above the surface of the surrounding soil. In the Deverill Barrow the far greater number were placed in cists below the original ground, and each carefully covered with an unhewn monumental stone or rock. One of the urns exhumed from the present barrow is of small dimensions; and from its lightness may be supposed to be entirely filled with bones, which are concealed by a hard crust of earth, raised like a dome above the rim. Its upper part is ornamented with five prominent circles or rings; and it is not only in perfect preservation, but is the most finished of all which have yet been discovered. But none of them are so elegantly formed as many of the Deverill urns; nor is there on any the least appearance of the favourite zigzag or chevron ornament of the Britons, so frequently found on Egyptian and Saxon architectural remains. Another of these urns, and of course the latest interment, was found very near the surface, covered with an unhewn flat stone, for the purpose of protecting it from injury. The question now naturally arises, was this grand barrow the cemetery of some once-celebrated family, or that of a succession of chiefs who filled the same office in council and in field? Either the one or the other it was most assuredly. It is remarkable that at the bottom of one of the vases is portrayed a cross, partly raised and partly grooved.

PIDDEHINTON DOWN.

[1831, *Part II.*, p. 552.]

As some labourers were lately digging for stones, for the formation of a new road over Piddlehinton Down, Dorset, they struck into a barrow, on excavating which two urns of unburnt pottery were found, full of ashes and burnt bones. They were decidedly British, from 8 to 10 inches high, and of an almost globular shape, ornamented merely with the customary line of dots.

LULWORTH.

[1825, *Part I.*, pp. 69, 70.]

The following is an account of some interesting remains of the ancient Autochthones of Dorsetshire, communicated by a correspondent to the *Dorset County Chronicle*. They were discovered some time since on the Domains of Lulworth.

"About a quarter of a mile from the romantic village of that name, a fine dome-shaped barrow of large dimensions, in the neighbourhood of numerous others, was fixed on for the purpose of exhumation, and opened accordingly. After penetrating about 3 feet within the surface, a belt of large flints, embedded in the earth, was discovered surrounding the barrow to a certain height, and seemed designed as a protection to the sacred relics in its centre; where a curiously vaulted sepulchre or kistvaen was found, composed of rude sand stones, full 3 feet in height above the surface of the ground, and 25 feet in circumference! It was so ingeniously formed into a regular and solid arch or dome, and so firmly united together, without any cement, as to completely resist the vast weight of the superincumbent earth which formed the tumulus.

"On removing the stones and opening this gloomy chamber of death, into which neither the sunbeams of morning nor the purple ray of evening had for so many ages entered, a large urn, in perfect preservation, and containing loose human bones, mingled with a very small portion of ashes, appeared in a leaning position directly in the centre, and resting on a large flat stone. Around it were placed several upright stones, the tops of which, pointing towards each other over the urn, formed almost a second dome.

"The inner circle of stones appeared to have been brought from the seashore, as they were evidently worn into small cavities by the action of the waves. This I do not hesitate to pronounce was the tomb of a chief, whose sepulchre, with its inner circle of stones, seems to have been raised in imitation of their temples, the most ancient of all religious edifices, if such places of worship may be so termed, and in which were offered 'the sacrifices of the dead.'

"Near to this barrow three others were opened, all of them containing similar vaulted tombs, but of much smaller dimensions, with inclosed urns. One of these kistvaens was erected on the south side of the tumulus. These were no doubt also Druidical; and what leads me the more strongly to consider them as such, is the certainty that not far from the site of these barrows stood once a sacred circle, or Temple of the Sun, and perhaps a cromlech. Till lately two of its vast stones or pillars, brought from their original situation, of which some faint remembrance is yet preserved in the neighbourhood, were still to be seen; one stood upright, and the other lay on the ground. The latter has been broken to pieces by a farmer to make

a bridge, and had he not found the other useful by way of a gate-post, it would no doubt ere this have shared a similar fate.

" Among the numerous tumuli that may be seen, far and near, to surround this once sacred spot, two others were opened, about the same time with those I have already mentioned. In one of them, after penetrating to the centre, a large flat sea-stone was found ; which being removed, and nothing to be perceived beneath it, the search was continued by digging deeper ; at length another large flat sand-stone was found in a perpendicular line below the surface, under which nothing could be discovered but fine black mould ; proceeding still lower, a third flat stone was taken up, and beneath it the urn lay embedded in white sand. In the other a large crucible-shaped urn, ornamented with an indented border of straight lines near the edge, appeared in the centre, and two small ones were placed leaning against its sides. These urns, I should imagine, held the ashes of a warrior and his two sons, who died or perished in battle very young. It has been suggested that they were those of a female and her two children ; but I do not think that probable, unless we allow the female to have been an Amazonian Queen among the Durotrigians, or their exterminating conquerors the Morini.

" The whole of these tumuli described are remarkable, and worthy to be recorded peculiarities in the Celtic interments, and unlike any to be met with in Sir Richard Hoare, Dr. Stukeley, or even King's '*Munimenta Antiqua*'.

" Another still more singular discovery has been made in the dark-brown wilds of the adjacent heath--even that of combustion and inhumation *without urns* ! The ashes of the dead appeared to have been mixed up with the blood of some victim, and moulded into the shape of a globe, then laid in a small cist, and carefully surrounded with stones, over which was raised a small barrow. These are deviations from a custom on which no antiquary, ancient or modern, has thrown any light. It however appears to me quite evident that this rude manner of interment was either anterior to the formation of the rudest vases of the Kelts, or that these singular barrows contained the remains of some inferior personages, for whom, although their ashes were not inurned, their friends were anxious to obtain the honour of a solemn burning.

" G. C. P. thinks it strange that no authentic record is extant respecting British tumuli, etc. Allusions to them may be found in the old Welch or Cambrian bards ; but if he will recollect that almost every work of the ancients that would have illuminated the mysterious subject, and dispersed the clouds that must now for ever hang over it, has lamentably perished, he will no longer be surprised. The great work of Polybius on the trade of tin, which would have given us much interesting matter relative to the particular manners and customs, as well as commercial affairs of the Britons, is entirely

lost. Livy's "History of Cæsar's First Invasion of this Island," and that of his second, written by Claudius, have shared the same fate; while those very parts of other classic writers which relate to British concerns are buried in eternal oblivion.

J. F. P.

BOROUGH HILLS, ESSEX.

[1840, *Part II.*, p. 114.]

In reading an account of Essex, I find the following: "The Borough, or rather Barrow Hills, on the north side of the Black Water Bay, were considerable in number. These tumuli are supposed to have been raised indiscriminately over the bodies of the Danes and Saxons that fell in the battles occasioned by the frequent landing of the former in this part of the coast. The lands on which the barrow hills stood were completely inclosed from the sea in 1807, and the whole are now levelled, *one excepted*."

This barrow I heard was going to be cleared away for manure. I made a point of visiting it under an idea that it might be proved a Roman one; when I arrived at the spot, I found it to be a bowl barrow, about 14 yards diameter, and about 6 or 7 feet high, and rather more than half of it cut away, and what surprises me, not a single urn, bone, or ashes, nor any mark to be found; perhaps the barrows being mostly under water during the tide may account for the disappearance of bones, etc., if there ever were any placed; or rather that the Danes and Saxons were not so careful as the Romans in preserving the remains of their friends. I met one of the old inhabitants who lived in the parish more than forty years; he remembered the number of barrows being destroyed, and said not a single bone or urn was ever found in them.

Perhaps you can give me some information, whether by digging *below* the natural surface of the ground, any remains may be traced. It is not a gravelled, but a clean, light clay soil. The land is low and marshy, and celebrated for Malden salt, and near it there is a decoy.

Yours faithfully, J. A. REPTON.

DUNTESBOURNE-ABBOTS, GLOUCESTERSHIRE.

[1806, *Part II.*, p. 971.]

A few days since a large oblong British or Danish barrow was opened in the parish of Duntessbourne-Abbots, Gloucestershire; in which was found a kistvaen, or cromlech, containing about eight or nine bodies of different ages, many of the bones of which, and the teeth, were entire. The whole length of the barrow, diagonally, was about 50 yards; straight over the stones about 40; the width about 30 yards; and the distance between the two great stones 24 feet. The barrow was composed of loose quarry-stones, laid in strata near the great stones, and brought from a distance. The largest stone, which has been long known in the country by the name of the

Horse Stone, is of the kind of Grey Withers, or Stonehenge : it is flat on the east side, and round on the side which is in the barrow ; is 12 feet high from the base, and 13 in circumference. The other stone lies almost flat on the ground, and is about 3 yards square, and 1 foot thick. This covers the kistvaen which contains the bones, and which is divided into two cells, about 4 feet square each, and 6 deep. There is little doubt of its being British. There are several other barrows in the neighbourhood ; and it is singular that the farm adjoining is called Tack Barrows, probably a corruption or abbreviation of some other name. The bones are reburied, but the barrow and the tomb will be left open some time longer, for the inspection of the curious.

SHERBORNE, GLOUCESTERSHIRE.

[1829, *Part I.*, p. 460.]

As some workmen were lately excavating a cellar, under part of the mansion of the Right Hon. Lord Sherborne, at Sherborne, in Gloucestershire, they discovered four ancient stone coffins of immense weight. Three of them were without covers, and one was covered with a lid about three-fourths of its length, with a star engraved on the part over the breast. The heads were almost perfect, but there were no inscriptions.

HORTON.

[1844, *Part II.*, p. 636.]

A few weeks since, as some labourers employed on Crickstone Farm, in the parish of Horton, Gloucestershire, were ploughing over a mound on an elevated piece of ground, called Church Hill, the earth suddenly gave way under one of the horses, and it was found that an entrance had thus been effected into a rude chamber measuring 4 feet in each direction, and containing the remains of six or eight human bodies, together with a vessel of very primitive shape, made from a blue sort of earth, and apparently baked in the sun, as it evidently had not been subjected to the action of fire. Some charred human bodies were also found, which had probably been the occupants of the vessel in question, as they were found near the same spot. The falling in of the earth and stones, and the unscientific exploration of the workmen, however, render an accurate description impossible. The bodies seemed to have been indiscriminately placed, and appeared as though they had been in a sitting posture. The size of the chamber would not allow of their being extended at length. The sides and top were formed of single flat stones, around and outside of which smaller stones had been loosely built up in the form of a wall. Connected with this, and lying at right angles on the eastern side, was another opening similar to the

former. The dimensions were about 6 feet by $2\frac{1}{2}$ feet; in this also were the remains of two bodies. Supposing that this was not a solitary vault, openings were made in several places in the mound, which was of about 40 feet in diameter, and appeared throughout to be constructed of loosely built up stones, of the same description as those dug up from the neighbouring quarry; and about a week afterwards another chamber, similarly formed to the last, of about 6 feet by 4 feet, and lying about 12 feet distance to the west, was discovered. In this were fourteen or fifteen human skeletons, all with heads to the east. The bodies must have been of all ages and sizes.

NYMPHSFIELD, GLOUCESTERSHIRE.

[1862, *Part II.*, p. 529.]

A chambered tumulus, which had been discovered a short time before in a partially ploughed field at Nympsfield, Gloucestershire, was opened in August last, under the superintendence of some members of the Coteswold Naturalists' Club. The longitudinal area of the sepulchre was defined by eight massive unwrought slabs of oolite, laid in pairs, and varying from 3 feet to 4 feet in width. The entrance was at the east end. It soon became obvious, from the disturbed state of the interior, that the barrow had been broken into and plundered at some former period. A great number of bones of both sexes were strewn around, indicating that the tumulus was the burying vault of some family or tribe, and not, as was at first suspected, the sepulchre of heroes. Altogether thirty-four femora were discovered, together with a skull, 22 inches in circumference, some jaw-bones, several of which evidently belonged to children, a piece of half-burnt pottery, some flint flakes, a boar's tusk, some pig's bones and incisor teeth. The whole of these objects were removed, and have been deposited, *pro tempore*, in the museum of the Agricultural College at Cirencester, where they are open to inspection.

ST. GILES'S HILL, WINCHESTER.

[1827, *Part I.*, p. 555.]

As some workmen were lately digging a vault at the burial ground on St. Giles's Hill, near Winchester, they discovered an ancient coffin hewn out of chalk, quite complete. On opening it, a very perfect skeleton was found, with sandals on the feet; the teeth appeared sound, and the body was enveloped with some kind of linen, which was so decomposed as not to allow of removal. The bones of the feet were standing erect, having been supported by the sandals; but on the slightest touch they mouldered to dust. An antique urn, composed of metal, was taken from the left side of the coffin, and is now in the possession of Mr. Wm. Coles, builder, of Winchester. There was no inscription either on the urn or coffin.

NEW FOREST, HAMPSHIRE.

[1825, *Part I.*, pp. 636, 637.]

Lymington, that part of the New Forest which adjoins a place called Shirley Holmes, indicates that it was at some remote period not only thickly inhabited, but strongly fortified in that peculiar manner which the early British adopted to secure themselves against the inroads of their enemies. The principal encampment or town is surrounded by double and treble banks and ditches, and situated on the point of a gently sloping hill. There are innumerable banks branching off in various directions, and to a considerable distance from the camp, varying in size and strength, as the liability of the situation to assault required. About 300 yards from the enclosed area are several tumuli, encompassed, as is generally the case, by small banks forming different angles. One of these barrows measures 140 yards in circumference, and has been 12 or 15 feet high (part being removed), encircled by a fosse. There are others of small dimensions, two of which were some years ago opened by Mr. Warner, author of the "History of Lymington." Another, which is within a few yards of the latter, was left untouched, and it is probable it might have been overlooked at the time from its being so much depressed, it not being more than 18 or 20 inches above the natural soil. This barrow was about a week since opened by two gentlemen who are connected with Messrs. Greenwood and Kentish in a new survey of this county. On removing part of the barrow an urn was discovered, which was placed in an inverted position in a cist, or cell, formed in the natural soil, deep enough to receive the urn, about 3 inches only appearing above the level. Its content were wood ashes intermixed with a portion of sand and small pieces of bone highly calcined. The urn was nearly decomposed, and required great care to extract it: its depth was about 16 inches; diameter at the top, 11 inches; bottom, 4 inches; and the greatest diameter in the middle, about 13 inches. The urn was surrounded by a quantity of black earth and sand, which had evidently undergone the action of fire. Over the urn was a thin covering of fine white sand, in which pieces of charcoal were found. formed the barrow. No pieces of warlike implements, coins, or trinkets, were found. The urn was made of very coarse clay, unburnt, and of the simplest workmanship. Taking these circumstances into consideration, there can be little doubt, if any, but this is a truly British work. Its contiguity to Buckland Rings is no proof that it is either Saxon or Danish, as some have imagined.

THE ISLE OF WIGHT.

[1863, *Part II.*, p. 441.]

The Rev. W. Fox, of Brixton, has deposited in the Newport Museum a British urn containing burnt human bones, which he recently excavated at the very edge of the cliff opposite Brixton. It was inverted upon a flat piece of clay resembling a tile.

NEWINGTON, KENT.

[1760, p. 371.]

The parishioners of Newington, near Hythe, in Kent, being at work on the highways, on Wednesday, the 11th of June, in grubbing up a hedge, in order to widen the road, at a place called Milky Down, in that parish, found a skeleton of human bones, which appeared perfect, except that the skull seemed to have been fractured, or much bruised, and there remained a good set of teeth firm in their sockets. The body seemed not to have been laid out at length, but doubled and thrust into a hole; no signs of any hair, linen, or woollen garments were found, nor any marks of a box or coffin; but about the place where the neck lay were taken up various sorts of beads, of different sizes, shapes, colours, and compositions, all with holes through them as if strung for a necklace; some were in the shape of drops for earrings, and we think are agate, or they may be glass of that colour, some of the lesser ones were pebbles, others glass, coral, or a red earthenware: small wire was found with them, but too much decayed to preserve. At or near the same place two more skeletons were dug up a few days after; with one was found some small beads, as with the former; these had the appearance of having been laid in coffins, but quite decayed, and the handles, on moving them, crumbled away to dust.

KENT.

[1822, *Part II.*, p. 84.]

As some workmen were lately ploughing in a field belonging to Mr. George Fowle, situated about a quarter of a mile from Kits Conti House, Kent, the ploughshare was impeded by something, which had repeatedly been the case before, and the men having a desire to ascertain what was the obstruction, they commenced digging, and a little below the surface found two stones, about $6\frac{1}{2}$ feet long and 2 broad, lying lengthways upright, but rather slanting, between which was a skeleton, in nearly a perfect state. The skull, teeth, and two of the vertebrae of the neck were quite perfect, but on being exposed to the air they soon crumbled into dust. The body lay directly east and west, and at the bottom was a stone which lay flat, supposed to have been occasioned by the pressure of the earth above. The soil is very chalky, and to this is attributed the excellent

preservation of the bones. The stones appear to be exactly similar in quality to those of Kits Conti House, and it is conjectured were placed there about the same time that monument was. The skeleton is doubtless that of some chief slain in the battle fought here between Vortimer, King of Britain, and the Saxons, which is said to have happened about the year 454. In that battle it is related that Catigern, brother of Vortimer, and Horsa, brother of Hengist, the Saxon commander, in single combat slew each other, and in memory of Catigern a monument of stones was there erected by the Britons, and which is now vulgarly called Kits Conti House. The lovers of antiquity will be glad to learn that a gentleman, who has long made researches into the early history of this part of the county, is now engaged in taking drawings of these curious remains of former ages, and through whom, it is probable, we may shortly be enabled to lay before our readers some further particulars.

TROSLEY, KENT.

[1841, *Part I.*, pp. 190, 191.]

In the month of January last, in lowering a hill on the Pilgrims' Road, between Wrotham and Trottesscliffe (commonly called Trosley), the labourers dug up, within 2 feet of the surface, a considerable quantity of human bones, the remains of bodies which had been buried in the chalk. It was surmised by some persons that these were the bones of pilgrims, who had been murdered by robbers, whilst others imagined they belonged to the slain in some ancient battle. But, in either supposition, the public highway would appear the least likely place for their interment, and the more probable explanation of the circumstance is, that the bodies were deposited before the formation of the road in the anti-Christian times. It was remarked that, a few years since, a great many human skeletons were found in the same road, about half a mile from these; that in 1797, when the road from Sevenoaks to Farningham, which passes through Otford, was widened, many skeletons were found in the chalk; and in 1835, when the London and Hastings road was turned at Morant's Court Hill, nearly twenty skeletons were found in a chalk field in the parish of Otford, together with some of the implements which frequently occur in the interments of the Britons. •

KEGWORTH, LEICESTERSHIRE.

[1794, *Part I.*, pp. 173, 174.]

On Monday last, as the sexton of Kegworth, County Leicester, was digging a grave for the interment of a private of the Derby Militia, in a part of the churchyard allotted to strangers, he discovered a very large stone coffin, about two feet below the surface of the ground. On removing the lid, two skeletons were found within, one of them entire, and it appeared they had been placed "head to

feet." On the lid were the remains of an inscription, but, we are sorry to say, rendered illegible by the spade and mattock of the sexton. The coffin was neatly cut, and the sides and lid about 5 inches thick. Every appearance renders it extremely probable that these skeletons were the remains of some persons of considerable note, and that they had lain in that situation several hundred years.

BURROW HILL, LEICESTERSHIRE.

[1806, *Part II.*, p. 1008.]

In the year 1803, when the unwelcome rumour of an invasion of this island by the French was so prevalent in the country, orders were issued by the Government for signal-posts to be erected in different parts of the kingdom, upon the highest and most conspicuous spires and eminences known in the several counties, in order that, should the enemy put their threats and preparations into execution on any part of our coast, the most speedy and prompt alarm might be given to the next station, and so to proceed from one signal-station to another, until the alarm would reach the most central and midland districts. For this purpose about fourteen signal-posts were ordered to be placed in Leicestershire; nine, I think, upon the highest and most conspicuous steeples, and five, I believe, upon as many eminences in the county, of which Burrow Hill was fixed on as one. Accordingly Mr. Richardson, an eminent carpenter and joiner of Leicester, who was appointed to fix them up at all the stations in the county, was to place one upon this hill. The part of the hill he chose for its station was at, or very near, the summit of the west angle of the upper embankment; a very little distance to the south of where the figure 3 stands in the plan as given in Mr. Nichols's "History of Leicestershire," vol. ii., plate LXXXV., p. 509, on the summit marked on the aforesaid plan *a*, nearly close to the figure 3, as I before observed. Here the workmen began to dig the hole in which the signal-post was to be fixed; but they had proceeded scarcely a foot in depth in stone and rubble (for there was but little earth intermixed), when they discovered the upper part of a human skull; and as they proceeded lower with their spades and mattocks, an entire skeleton was fully developed, apparently in a sitting or standing position, as if it had been immured in this embankment (which consists almost wholly of stone) at its first formation. The under-jaw, which I have seen, is very perfect; the teeth all sound and firm, and their enamel white and good. By the side of the skeleton was found an iron spear-like weapon, in a position as if it had been placed close to it at the time of interment, or rather, perhaps, immuring. This weapon is about fifteen or sixteen inches long, including part of a socket, in which are the much-corroded remains of a handle, apparently of wood. It is ridged on both sides, up the middle, and was formed with two edges; the whole much injured

by rust. This weapon is in all respects, except being rather longer and narrower, similar to one dug up by the side of a skeleton in Medbourn Field in the year 1794, of which I gave an account in the *Gentleman's Magazine*, vol. lxv., p. 274 [see Note 14]; also in Mr. Nichols's "History of Leicestershire," vol. ii., p. 177, where a drawing of that is given in plate cxi., p. 657.

Yours, etc. J. TAILBY.

KIBWORTH HARCOURT, LEICESTERSHIRE.

[1837, Part I., p. 641.]

A tumulus has lately been opened at Kibworth Harcourt, Leicestershire, and excavated sufficiently to give some idea of its singular construction. After removing some rich soil from the surface, a stiff clay, similar to what is found in the neighbourhood, was cut through to the depth of about 4 feet, when a quantity of burnt matter was discovered, in a thin layer, but extending over a large surface. Near the centre was found a pavement, consisting of large pebbles, which had evidently been exposed to a great heat. This, in all probability, formed the basis of a funeral pile, as fragments of burnt bones and pottery were found embedded in the ashes. After clearing this away, another stratum of clay was cut through, which was again succeeded by a layer of burnt matter. Here were found two pavements, about 7 yards apart; one near the centre, and the other on the west side: these were lying on the natural soil, and, like the other, bore marks of fire. It is evident that this tumulus was erected at different periods. On approaching the outside, each layer assumes the form of a peculiar arch. It appears the site was first marked out by an embankment. Although the centre has been thoroughly explored, and three distinct places found where cremation has been used, it is very doubtful if the principal interment has been discovered, as the greater portion of the tumulus yet remains undisturbed.

GRIMSBY.

[1828, Part I., pp. 545, 546.]

An ancient cemetery of considerable extent (says the *Stamford Mercury*) has been recently discovered at Wold Newton, near Grimsby, by some men who were digging for gravel. It consists of a large tumulus, containing an area of three or four acres of land; on the summit of which is another of smaller dimensions, thrown up in a rectangular form, and covering little more than a rood. Within this tumulus, more than twenty urns have been found, arranged in a right line the whole length of the mound, placed on their bottoms with their mouth upwards, and filled with a quantity of black and greasy earth and cinerated bones. They were of various sizes and shapes, and placed about three feet from the surfaces, in a bed of gravel, at

irregular distances; some being close together, others three or four feet apart. They were all broken in the operation of taking them up, except three, which are in the possession of the Rev. G. Oliver, of Grimsby. The largest measures 9 inches in perpendicular height, and $32\frac{1}{2}$ inches in circumference in the widest part; the other two measure each 5 inches in height, and in circumference 21 and 18 inches respectively. They are all composed of coarse pottery, moulded by the hand and baked in the sun, and decorated round the sides with rude carvings in lines and circles. No coins, weapons of war, or ornaments, were found with them. These urns are conjectured to be British, and to have contained the ashes of persons of consequence.

NOTTING HILL.

[1841, Part II., p. 499.]

As some workmen were employed on the 7th of August in digging the foundations for the new buildings situated in Victoria Park, near the Hippodrome, on Notting Hill, in the parish of Kensington, they discovered, at about 6 feet from the surface of the turf, a stone coffin, which they at first mistook for a covered drain, and unfortunately broke it with pickaxes. It was composed of a single stone, and contained a skeleton, the teeth of which were nearly entire, and the cranium and bones in good preservation, the interior being filled up with lime. The coffin was composed of fine grit or Purbeck stone. Its internal length is 6 feet 2 inches, its external length 6 feet 8 inches; breadth without 2 feet 3 inches, breadth within 1 foot 8 inches. It was placed north and south, the head lying to the north.

At the same time, and near the same spot, were found three other skeletons, which were also lying from north to south: the greater part of these latter crumbled to dust upon being exposed to the air. It is conjectured that further discoveries will be made as the workmen proceed with the excavations on the southern brow of the hill, descending towards the ancient manor-house of Notting-Barnes.

Yours, etc. THOS. FAULKNER.

WOOD DALLING, NORFOLK.

[1840, Part II., pp. 643, 644.]

The following interesting communication connected with the antiquities of Norfolk was lately made me by my worthy friend, Mr. Goddard Johnson, of Marsham, one of the most zealous and useful investigators of our County Topography. Should it appear to you deserving of a place in the *Gentleman's Magazine*, I shall be glad to see it inserted there.

Yours, etc. DAWSON TURNER.

"Since I had the pleasure of being at your house, a curious discovery has been made in the parish of Wood Dalling, near Aylsham.

A farmer there, of the name of Palmer, had employed his men to cleanse the mud, which had been accumulating for many years, from an old pit of considerable size in one of his fields. In the course of this operation they discovered the heads of sixty oxen, a like number of the heads of sheep, and several of goats. Together with these was found a quantity of other bones; indeed, so large a quantity, that two or three tumbril-loads were sold by the men to a bone-collector, and are before this time ground down for manure. The most remarkable part of the story is that in the midst of this collection of animal bones lay the body of a human being, interred in a coffin formed of oak planks, which appeared more than 2 inches thick, but which were in such a state of decay that there was no possibility of removing them without their crumbling to dust, and that by the side of the coffin was the upper stone of a quern of braccia or plum-pudding stone, and with this a neatly wrought Roman patera of Samian ware, having the maker's name in the centre of the bottom within. There were also several fragments of urns of a coarser earth, on which no ornament or pattern of any kind whatever was to be detected. The patera was parted nearly across the middle; and a small piece of the rim is wanting. It is now in my possession, Mr. Palmer having given it to me. The maker's name is SAIILVS.

"It would naturally be concluded from such a discovery, that we had met with the burial-place of an individual of distinction—whether Briton, Roman, Dane, or Saxon, it might be difficult to pronounce—to do honour to whom a large quantity of cattle had been slain, and had been interred with him. But must we not assign very different dates to the pottery and the bones? Is it possible that the latter should so long have resisted decomposition? and does not this circumstance forbid that inference? I have myself been so far impressed with such a belief, that I have been rather disposed to account for the strange deposit by assuming that an epidemic disease of a fatal nature must at some time have raged among the cattle, so that they died in large numbers, and were thrown into this hole, in which it happened that one or more human beings had previously found their place of sepulture. Here, however, I am met by a startling fact: the shank-bones of the smaller animals, whether sheep or goats, were found lying side by side in bundles of ten or twelve, 'folded up,' as Mr. Palmer distinctly described them, 'like a land-chain.' Thus the idea of an accidental hasty deposit becomes inadmissible, and my theory falls in pieces.

"Another circumstance worthy of notice, which I do not recollect if I mentioned to you, was a discovery made in the autumn of 1838 at Northwold, not far from Stoke Ferry. Some labourers, in casting mould into a meadow from a spot that was but slightly raised, and had no appearance whatever of a tumulus, met with several urns of coarse fabric and unornamented. With these were many swords

spear-heads, and shields, apparently entire, but so excessively oxydized that they fell to pieces almost as soon as touched. I saw some of the relics in the possession of a gentleman at Wereham. The umbo of one of the shields remained tolerably perfect; but this was the only portion that did so. Together with the above, the workmen picked up several brass fibulæ, and strings of beads, some of blue glass and ornamented, others of amber. The latter were very rough, and the rudeness of their execution makes me inclined to the opinion that they must have been of the manufacture of the early Britons, rather than of their refined invaders, the Romans. I have, through the kindness of the gentleman on whose grounds the last-mentioned articles were discovered, procured a tolerably good string of the beads, together with two or three of the fibulæ, and a cup of very rude earth, about the size of a breakfast cup."

NEWCASTLE.

[1828, *Part I.*, p. 462.]

As the workmen were lately trenching the ground for planting at Villa Real, near Newcastle, they found a curious rude-stone coffin, composed of six flagstones, containing the skeleton of a tall man, in complete preservation, with an urn standing by the side of the head. It appears to be one of the most perfect specimens of the ancient British sepulchral vases that has been yet found. Mr. Blackbird has presented it to the Antiquarian Society of Newcastle.

[1844, *Part I.*, p. 637.]

At Crag Hall, Fesmond, near Newcastle, the residence of Mr. Charles Adamson, whilst the gardener was levelling and trenching the ground for a grass-plot in front of the house on the 27th of March, he discovered two graves built with flat stones set edgeways, so as to form the sides of them, having a flat stone laid on the top as a cover. In these were discovered four ancient British urns of an early date, containing fragments of bones and earth. Unfortunately only one of the number was got out whole.

BRISTOL.

[1789, *Part I.*, p. 80.]

A barrow, or tumulus, has lately been opened near Bristol, the contents whereof promise matter of curious speculation to the antiquarian reader; of which, when thoroughly examined, an exact description will be given [see Note 15].

BATH.

[1789, *Part I.*, pp. 392, 393.]

Considering your magazine the most eligible for circulating at present, and preserving in future, the singular (as I believe) subject

of this letter, I make no apology for soliciting it may be inserted therein. I entreat you will give me credit when I assert that, exclusive of the incitements I have alluded to, I should not have hesitated in determining where my mite should be deposited; respect and gratitude indubitably point at the *Gentleman's Magazine*.

Yours, etc. THOS. BERE.

On the 8th of January last, I published in the *Bath Chronicle* a short account of an extraordinary barrow, or tumulus, which had been recently discovered in the neighbourhood of my residence. This I did in hope of attracting the attention of some gentleman who, from knowledge in ancient history, might have been able to give the public information, or probable conjecture at least, relative to this new species of sepulchral monument. To invite investigation, I subjoined my address; and happy should I have been in giving every information or assistance my locality afforded me to such an one. But as no such investigation has been made by any one of competent abilities, I venture to obtrude, rather than suffer so curious a discovery to pass back into the regions of oblivion, without that respect which, I am persuaded, its singular construction demands.

The barrow is, from north to south, 150 feet; from east to west, 75 feet. This looks more like a designed proportion than the effect of chance. It has been immemorially known by the name of "Fairy's Toote," and considered still, by our sagacious provincials, as the haunt of ghosts, goblins, and fairies. This may be deemed the electrical tremblings of very remote superstition. The idle tale travelled down through many an age—long, long after the cadavers from which it originated had ceased to be had in remembrance. Desirous of obtaining stone for the adjacent roads, the proprietor ordered his workmen to see what the Toote was made of. They accordingly commenced their labours at the southern extremity, and soon came to the stone D, which then was at A, with a considerable west inclination, and no doubt served for a door to the sepulchre, which, prior (and in some instances subsequent) to Christianity, was the common mode of securing the entrance of these repositories. Such was that which was placed at the mouth of the cave wherein our blessed Saviour was interred. The stone D being passed, an admirable unmortared wall appeared on the left hand, and no doubt a similar one after the dotted line on the right once existed, as we find it continued in the same direction at F. This wall was built of thin, irregular, base freestone, less in length and breadth, but in general thicker than common Dutch chimney tile. Its height was somewhat more than 4 feet; its thickness about 14 inches: 13 feet directly north from A (where the stone D stood) the perforated stone B appears, inclining to the north about 30 degrees, and shutting up the avenue between the unmortared walls.

Working round the east side, at I, a cell presented itself, 2 feet 3 inches broad, 4 feet high, and 9 feet from south to north. Here were found a perfect human skull, the teeth entire, all sound, and of the most delicate white: it lay against the inside of the stone B, the body having been deposited north and south. Several other pieces of skulls, human spinal joints, arm-bones, etc., were found herein; and particularly the thigh-bone of a very large quadruped, which, by comparing with the same bone of an ox, I conjecture to have belonged to an animal of that species. As the skull appeared to me larger than common, I was willing to form some conjecture of the height of that body to which it belonged, and applied my rule to it, taking the painter's datum, of allowing eight faces (from the hair on the forehead to the shin) for the whole, found it gave something more than 8 feet. With this the length of the sepulchre agrees, being, as was before observed, 9 feet. In this cell was also found the tooth of some large beast; but no one that has seen it can guess of what genus. At the termination of the first sepulchre, the horizontal stones in the top of the avenue had fallen down. With some difficulty, and no little danger, I obturated far enough to see, by the light of a candle, two other similar catacombs, one on the right, the other on the left side of the avenue, containing several human skulls and other human bones; but which, from the imminent hazard of being buried in the ruins of the surrounding masses, have not yet been entered. This, as far as it goes, is a true account of the discoveries at the southern extremity of the tumulus. The lateral section at G has afforded as yet nothing more than a view of the unmortared wall, seen in the southern extremity at H, and here at F, with the continuation of the central avenue seen at B, and here from C to C. This avenue is constructed of very large rock-fragments, consisting of three stones, two perpendicular and one horizontal, as may be seen in the representation E. Three cells are here discernible, two of which are on the west side, and one on the east; these, also, have human bones. The proprietor means now to proceed from B to C C, propping up the avenue with wooden posts, in the same manner in which our miners do their adits, to the lapis-caluminaris veins. This mode will give the visitor an opportunity of seeing the different cells with safety and convenience. I have only to add that the tumulus is formed of small whitish stone, of which the neighbourhood affords plenty; and that the exterior appears to have been turfed, there yet remains a stratum, 5 or 6 inches deep, of grassed earth on the stones. The view I took on the spot, in one of the sneaping days of the last rigorous season. I can therefore say nothing for it, but that, if it be not a *good drawing*, it is a *true representation*. When the central avenue is cleared, I purpose to send you the ichnography. In the meantime, through your publication, I beg to present my compliments to your correspondent, Owain o Feirion, who, if I mistake not,

is my old college acquaintance, and other gentlemen who may have a turn for such investigation; and hope, through your valuable vehicle, to have their sentiments on this subject. But, Mr. Urban, if no other more able hand shall give the public conjectures relative to the history of Fairies Toote, you shall again hear on this subject from your old correspondent. [See Note 16.]

[1789, *Part II.*, p. 606.]

Mr. Bere must excuse me when I doubt the probability of the skeleton measuring 8 feet. The marvellous will too often intrude in the pursuits of antiquaries. The size of the skull will not, by the most critical rule of comparative anatomy, apply to the whole of the human structure. It only argues the man to have had a larger skull than common. If discovery had been made of a perfect thigh-bone, his deduction might have been granted. Some few years back, on the opening of a barrow, I was hurried from my repast, in the company of some friends, by three Irish soldiers, who came running out of breath to me with assurance that they had discovered a perfect skeleton, the enormous size of which they pronounced, before I reached the spot, to have been the carcase of a prodigious giant. Eager to transport myself to the spot, I arrived panting for breath, when to my great mortification, and check to a curious avidity, I found the bones not exceeding the ordinary human stature. Vexed from my own disappointment, and the exaggerated account of the Hibernians, I seized a thigh-bone from the grave, and, after having made one fellow stand erect, to measure it by his own, I belaboured the fellows with it for their natural promptness to magnify these casual discoveries into the marvellous. It cured my spleen, and I returned in better humour, though somewhat disappointed, to my friends.

The thigh-bone of the ox found in the Fairy's Toote barrow fell from the factitious soil, and could not by any means apply to the sepulchral rites. Sacrifices to the manes of the dead were performed when the interment was closed, and would not therefore be found with the remains.

The nondescript tooth which Mr. Bere also discovered would afford the greatest satisfaction to the writer if he would convey a drawing of it to the printer of this magazine, or the tooth itself, which shall be carefully examined, and as carefully returned; not doubting but the animal, or species of animal, would be ascertained.

On further prosecution of researches into this curious barrow, the greatest attention should be paid in breaking into the fresh catacombs not to disturb the order of the interment, bones, etc.; and the most minute inspection should be made for coins, fragments of metal, pottery, or any other sepulchral exuviae.

If a further research be made into the Fairy's Toote, I have many reasons to think the central catacomb may be productive of some

curious sepulchral relics, and which may, in all probability, serve to illustrate its history.

TUMBORACUS.

WESTON-SUPER-MARE.

[1852, *Part I.*, p. 295.]

At Weston Camp, near Weston-super-Mare, an extensive earthwork on the coast of Somerset, some recent excavations have disclosed a large amount of sepulchral remains. A portion of the area of the camp is covered with pits from 6 to 10 feet deep, some circular, and one surrounded by rude masonry; about fifty have been opened, and about ninety remain unexamined. They contain occasionally skeletons, fragments of pottery, and charred wheat; in one was a spear-head. Dr. Pring and Dr. Thompson infer that "the skulls found present two distinct types, the one coinciding with that of the degenerate British of the period of the Roman occupation; the other offering more resemblance to the Teutonic type. They likewise furnish an illustration of the value of the classification of Professor Retzius, presenting as they do examples of each class and order of his general arrangement of crania; those, however, of the first class and second order, or those with the lengthened oval or dolichocephalic form of the head, and prognathic jaws, being by far the most characteristically developed."

ROMFORD.

[1852, *Part I.*, p. 295.]

At Romford, during the formation of a sewer for a new street on "Stewards," now the property of the Freehold Land Society, the workmen have discovered bones, doubtless human, accompanied by spear or lance heads, and remains of arrows and tomahawks. They appear to be made of copper, with an enamel or glass coating, which, in some instances, retains its original polish.

THROWLEY HALL, STAFFORDSHIRE.

[1865, *Part I.*, pp. 164-166.]

In Capt. Parry's second Polar voyage we are informed that an Esquimaux having lost his wife, the sailors piled over her grave a great heap of stones. The man expressed a dread lest the pressure of the huge pile would be painfully felt by his deceased spouse; and soon after, when an infant died, he declared her wholly incapable of bearing such a burden, and would allow nothing but snow to be laid over her. I am inclined to think that an early tribe, if not the oldest yet one of very great antiquity, that occupied the midland counties, at least those of Derbyshire and Staffordshire, entertained similar feelings towards the dead, and would admit nothing in the construction of their grave-mounds but earth to lie lightly upon them.

Barrows of this formation have been opened by Mr. Thomas Bateman and myself; they are not wanting even where stone is plentiful. It would be a useless as well as a tedious task to go through a separate description of these mounds, as it would in the majority of cases be only a repetition of earth, charcoal, burnt bones, crushed urns, and rude instruments of flint, which in most examples had had no other manual labour bestowed upon them than the blow that detached the flake from the block. Certainly the description would be a little varied by the occasional discovery of a bone pin, or the calcined human remains without either urn or flint. The highest situations were then much the same as the churchyard is now, the sacred depository of the dead; consequently, when two barrows are situate near to each other, but on different levels, we should give the priority to the one occupying the highest situation; and as a corroborative evidence of the extreme antiquity of such barrows, or at least the generality of them, when I have found two so situated, the one formed of earth alone and the other composed partly of earth and partly of stone, the one formed of earth occupied the highest situation. The floor of these barrows is sometimes very compact, the turf and light superficial soil having been removed before the ceremony of burning the body and depositing the ashes in a collected form was accomplished. Occasional shallow depressions on the floor contain a cake of oxide of iron, effected by the permeation of water through ferruginous soil, which the unconsolidated mound allowed free passage to, but which was intercepted by the firm floor. Barrow-diggers sometimes have mistaken such small pans for decayed armour or instruments of iron, but a little inspection has soon made their true nature apparent. Another circumstance is too prominent to be passed over, that is, very few of the earth mounds contain more interments than one, and those that do are referable to a later period—I speak of those that I am acquainted with—and that interment is calcined bones, and in some instances so far returned dust to dust as to be scarcely discerned by the most practical eye; not only indicating their extreme antiquity, but that the aboriginal Britons were not accustomed to those barbarous rites, so universally prevalent, of sacrificing human beings on the funeral pyre along with the dead corpse. Sacrificial rites consequently were either introduced by an influx of still more barbarous tribes that intermixed with the aborigines, or were introduced in later times by intercourse with the Continent. Such interments afford no materials for the osteologist, the bones being too fragmentary for comparison. The articles that accompany them may be similar to some others of a much more recent date, but the archæologist will take the whole combination of circumstances whereon to found his inductions.

The barrow now under more particular notice differs in the character of the contents from all other mounds composed entirely of earth

that I am acquainted with. It is situate near Throwley Hall, in the moorlands of Staffordshire. It is 17 yards across, and 3 feet deep. It was opened February 10, 1849, when upon approaching towards the centre one of the assistants suddenly sank to his knees in black impalpable powder, which was found to cover a double interment, deposited in a circular hole, which had been made in the loose limestone rock, which here was intersected by numerous veins of clay. The hole was about 2 feet wide and 1 foot deep. It appeared that an adult had been buried in a wooden vessel, as the same black powder, intermixed with pieces of apparently charred wood, intervened betwixt the bones and the sides of the hole. Upon the bones lay a small bronze pin, and a perfect and beautiful vase "incense-cup," $2\frac{1}{2}$ inches high and $3\frac{1}{2}$ inches in diameter, ornamented with chevron and lozenges, and perforated in two places at one side. This was full of very small bones, also calcined, amongst which were discovered some small rudimentary teeth. The bones of the adult were not reduced by calcination to such small fragments as are found in many cases. Amongst them were found two small pointed pieces of flint and a pebble, and beneath the deposit the scapula of a large animal, which had been cut by flint saws or other equally primitive instruments. At the west side of this double interment, and not far removed, were four other deposits of burnt human bones, placed on the floor of the barrow, at short distances from each other, in conical heaps, without either cist, urn, or any protection whatever. These had been so thoroughly reduced by fire that they bore more the appearance of lime than of human remains. As all the deposits in the barrow were found undisturbed, it is evident that all were buried at one and the same time. No secondary interment could have been effected without displacing the previous ones. It may be presumed on very probable grounds, that all except the principal one in the cist had been immolated; and what farther serves to confirm this conclusion is, that whereas the central deposit had a few accompaniments, although of a rude and meagre character, which only bespeak the poverty of the individual, and the bones were in a good state of preservation, owing to their having been carefully burned and also carefully buried, the others had been almost consumed by fire; neither was there so much as a chip of flint found with any of them. The central deposit appears to be the remains of a person of distinction, and a female, as will be stated hereafter. From the classical writers we learn the almost universal custom of the ancients sacrificing the wife on the death of her husband, or slaves or domestics on the death of their lord, of captives on the pyre of the warrior. In Britain cinerary urns are occasionally found, with small vases placed upon or within them. They have mostly two small holes in one side, pretty near to each other, but for what purpose the perforations were intended is not very evident. They have obtained the

name of incense-cups, but the perforations are not adapted either for suspension or vents for perfumes. They are usually found to contain small burnt bones, which can be no other than those of infants. A double cist was found at Arborlow, not far from this under notice. One division of the cist was large, the other small. The calcined remains of an adult individual occupied the large compartment, a few small bones the other. These double interments, *i.e.*, of an adult and child, I presume are respectively the remains of a mother and an infant, or very young child. If the wife was sacrificed and buried with her deceased lord that she might accompany him to the invisible world, and the slave or domestic to attend his master, and the dog with the hunter to bear him company in the upper sky, we may reasonably infer from thence that infants were sometimes sacrificed on the death of the mother, to partake of her maternal care. Had we no faith in Cæsar's description of the Britons and their customs, the tumuli would inform us how greatly they were accustomed to the shedding of blood. Other considerations might also have their influence over the human brute, as the inconveniency that would be experienced by a wandering people in a climate like ours, by having a motherless infant to attend to, and no female naturally attached to it to undertake the charge.

I am, etc. W. C.

DUNWICH.

[1788, *Part II.*, p. 792.]

A pot or urn of about a quart measure was taken out of the cliff at Dunwich, in Suffolk, about 5 feet below the surface of the earth, in 1786. Pieces of many others, of a similar and different make, were found at the same time, filled with ashes, bones, etc. They are of a hard, blackish earth.

A pot of whitish stone was dug out of the ground by some labourers, as they were cutting a ditch for a fence on the walks near Dunwich, in 1787.

BURY ST. EDMUND'S.

[1843, *Part I.*, p. 522.]

A number of skeletons have been lately found in a field in the Tollgate Lane, Bury St. Edmund's, belonging to Mr. Thomas Fenton, of this town. They were turned up by the spade at about 1 foot below the surface; were at least twenty in number; and appeared to have been deposited with great care, as they were lying at full length and in a row. With them was a small urn of coarse ware and rude workmanship, but quite empty.

SHACKLEFORD, SURREY.

[1843, *Part I.*, p. 192.]

Several British sepulchral urns have lately been dug up on the lands of Mr. Roker, at Shackleford, near Peper Harow, in the County

of Surrey. They are of inferior workmanship, and contained, as usual, a deposit of burnt bones, but nothing else remarkable was discovered.

HOLLINGBURY CASTLE, SUSSEX.

[1825, Part I., p. 260.]

A labourer lately employed in digging flints near Hollingbury Castle (the ancient earthwork or camp on the summit of the hill between Brighton and Stanmer), discovered an interesting group of antiquities, placed very superficially in a slight excavation on the chalk rock. It consisted of a brass instrument called a celt, a nearly circular ornament spirally fluted, and having two rings placed loosely on the extremities; and four armillæ, or bracelets for the wrists, of a very peculiar shape. All these instruments are composed of a metallic substance, which, from the appearance of those parts where the green patina, with which they are encrusted, has been removed, must have originally possessed a lustre but little inferior to burnished gold. They are clearly of either Roman or Anglo-Roman origin, and probably were buried on or near the site of interment of the individual to whom they belonged.

LEWES.

[1765, p. 525.]

In your September magazine for 1763 [see Note 17], you were pleased to insert a letter sent you, giving some account of discoveries of antiquities on the South Downs. I now trouble you with another on the same subject:

The latter end of this summer (1765) a person digging flints at the same place where the other discoveries were made, and opening a barrow or tumuli (or, as they are called by the inhabitants, burghs) found three urns of different sizes, carefully placed with their mouths downwards, full of burnt bones and ashes, but the urns were too far decayed to be preserved whole: I am not inclined to think, as some do, that these tumuli were raised over persons slain in battle, but that they were the common burying-places of the original inhabitants, as, by the different sizes of the urns, seems to favour my opinion that it might be for a whole family.

Lately a person digging flints near an old camp, called Wolsonbury Hall, about ten miles west of Lewes, found several human skeletons with each a warlike weapon lying by its side, resembling a common hanger. These were probably slain in battle, and were buried without any monument or tumuli raised over them.

I am, etc. S. VINE.

[1834, Part II., p. 418.]

As some workmen were employed in excavating a field in St. Ann's, Lewes, for the formation of a tank for the Water Works Company, they discovered a variety of ancient British vases and human skele-

tons, at the head and feet of which were placed what antiquaries term drinking-cups, of the barrel form, supposed to have contained food for the dead. There were also several sepulchral urns, containing the calcined ashes of human bones. One of these urns, having an ornamented handle, was evidently moulded by hand, and decorated with some pointed instrument. Two of these relics were discovered at an unusual depth from the surface of the earth (at least 14 feet), embedded in the solid chalk rock, and placed at right angles: surrounding these were the bones of various animals, such as sheep, hogs, calves, cats, birds, boars' tusks, etc. The whole of the vases were of rude workmanship, and composed of the usual coarse black earth.

ARUNDEL.

[1835, *Part II.*, p. 648.]

A short time since a tumulus was opened at Burpham (formerly Burgham), three miles from Arundel. It is known by the appellation of Pipering Barrow; which is also the name of the manor. Within it a cist was discovered, 2 feet 6 inches below the original surface of the ground, which contained a skeleton, in good preservation, 6 feet 1 inch in length. Below the hand on the left side were the remains of an iron sword, and above the head, on the right, a piece of the same metal, conjectured to have been the point of a spear. This barrow is not far distant from the ancient camp of Burgham, a work attributed by antiquaries to the Belgic Britons. Several other tumuli in the neighbourhood are about to be opened during the summer.

CROSBY GARROT, WESTMORELAND.

[1793, *Part I.*, pp. 116, 117.]

However rude the monuments of our ancestors may appear to the eyes of a more civilized race, I doubt not but the humble tumulus will convey to posterity as deep an impression of the brave actions performed by its now mouldering contents as the magnificent and gorgeous marbles that decorate our noblest edifices; and that long after those are defaced by the unerring hand of Time, the green-turfed mound and grey mossy stone, without the aid of sculpture, will say, "Here sleeps, on his humble bed, a warrior." At what period one of the following description (lately discovered and opened by the Lord of the Manor of Crosby Garrot, in the county of Westmoreland) has been raised, I know not; some of your correspondents, more critically acquainted with such antiquities, may probably be able, from the following account, to say what era produced it. Six bodies were cased in stone coffins made of the slates common in that country. The bottom of each consisted of two or three stones well joined; every side had from two to four, which were rather obliquely placed, over

which were laid stones, similar to the sides, all the length ; there had not been any cement used, but each edge lay about an inch over the other. Over these six earth and stones had been thrown about 6 inches higher than the coffins, and then four others exactly like the former (all due north and south) upon them, which were all covered about 2 feet ; there appeared not to have been any distinction to any particular body, as in that opened at Halford Bridge. Around the whole (which was about 10 yards in circumference) a circle of flat stones was placed edgeway, with their tops but just appearing above the ground. The bones of those that were opened were not much decayed ; one skull had apparently been cloven half down by a sharp instrument, and other bones mutilated ; the teeth in most of them were perfect. No armour or clothing appeared to have been inhumed with the bodies. The whole lay open a few days, and then was restored as nearly to its former state as could be. It is situated in a common pasture, called Bullflat, under a hill, around which the remains of a fosse are still in many places to be traced. At the top of the hill are two more mounds, like the other (though not so large) which have never been opened, and which, I doubt not, are similar tumuli.

Yours, etc. T. C.

NETTLETON, WILTS.

[1822, Part I., p. 160.]

Having, during our antiquarian researches on the line of the Fosse Road between *Aqua Sulis* (Bath) and *Corinium* (Cirencester) remarked a long barrow, with a cromlech, or kistvaen, projecting over its eastern summit ; and having, for many years past, cast a longing eye upon this singular vestige of early British antiquity, I at length, in the year 1821, put my long-intended plans into execution ; and by the kind permission of the lord of the manor, Dr. Carrick, M.D., of Clifton, began my researches on the 9th of October, 1821 : and I now send you an accurate statement of our progress *sub terrâ*.

This long barrow is situated in the parish of Nettleton, which adjoins that of Littleton Drn or Drew, a name evidently of Druidical antiquity. It is placed at a very short distance from the great Roman road called the Fosse, which traverses the whole of our island from Lincolnshire in the north to the western coast of Devonshire.

Our operations commenced on the 8th of October ; and a stout body of spadesmen, with our able pioneer, John Parker, at their head,* began their work, which was rather arduous, the whole of the barrow being almost entirely constructed with loose stones. Being determined to spare neither trouble nor expense in developing the history of this singular tumulus, and hoping to find our Wiltshire

* John Parker was the able investigator of the numerous barrows we opened in various parts of Wiltshire.

maiden *intacta et inviolata*, we determined to make a complete section along the centre of the mound.

A deep trench was cut through the *dorsum* of the barrow, beginning at the eastern end where the elevated stones were placed, to the extent of 150 feet.

We began our excavation as nearly as we could with safety to the cromlech or kistvaen;* for though a zealous antiquary, and anxious to dive as deeply as possible into the womb of time, I could not conscientiously endanger the falling of the stones. We dug, however, as near as possible to them, and down to the surface of the natural soil; or, according to our old phrase, the floor of the barrow. In so doing, we found many pieces of charcoal, mixed with the earth, indicative of fires having been kindled on the spot for the purposes of cremation, or for the celebration of some religious rites connected with the burial. The floor of the barrow seems to have been covered with a layer of large flat stones, and the sides were protected with similar layers. A wall of the same kind of flat stone was formed near the kistvaen at the eastern extremity of the tumulus, which seemed to indicate that this spot had been selected for the principal deposit;† and indeed there was the appearance of a very rude arch, constructed with loose flat stones, immediately beneath this kistvaen.

The two first days were thus employed, but without any important discovery. On the third, our pioneers (whilst continuing the line of the proposed section) perceived indications of an interment about 30 feet from the eastern extremity of the barrow; two joints of finger-bones having been turned up. But here their operations ceased, until the owner of the tumulus, Dr. Carrick, with his friends, could attend. In the meantime, the Rev. Mr. Skinner, a zealous investigator of British and Roman antiquities, and Mr. Philip Crocker, an able surveyor and draftsman, were employed in taking exact measurements, drawings, etc., of this barrow.

The average depth of the barrow still continued about 6 feet; and at the distance of 30 feet from the site of the sepulchral deposit, the labourers came to a wall of loose stones extending across the barrow, which they left untouched, under the idea of finding another interment in the vicinity. They then began to excavate the trench at the western extremity, in order to meet the other beyond the wall; but, in so doing, they found nothing worthy of notice, except some detached pieces of charcoal.

The 11th of October was the day of trial; and on these occasions

* The cromlech and the kistvaen differed in their construction; but the difference between them has never yet been satisfactorily defined. Some think the former was altarial, but the last, I know from personal researches, was merely sepulchral, *alias*, a stone chest, to enclose the relics of the deceased.

† I have no doubt that the primary interment was placed under these large stones; but we could not venture to undermine it, though some of our spectators thought it could be safely done by means of props.

curiosity is always awake, which was evinced by the numerous spectators who attended on the ground.

R. C. HOARE.

MARLBOROUGH.

[1800, *Part II.*, p. 1025.]

Plate 1 represents the north view of a fine cromlech on Marlborough Downs, Wilts, situated about two miles from the town of that name, and the same distance from Avebury, that grand temple of ancient Druidism. As I have never seen a correct view of it published, and being desirous of collecting every "scattered ray of information" upon the Druidical monuments, as well as the natural history of Wiltshire, I have been induced to make a drawing for the *Gentleman's Magazine*, hoping, through that medium, to obtain some information upon this object. I therefore solicit the favour of your correspondents to give me and the public any remarks, observations, or opinions upon these or any other subjects connected with the county.

J. BRITTON.

STONEHENGE.

[1808, *Part II.*, p. 648.]

On the 11th, 12th, and 13th inst. Mr. Cunnington opened various barrows in the neighbourhood of Stonehenge, under the direction of Sir Richard Hoare, Bart., and with the aid and assistance of A. B. Lambert, Esq., and found a number of curious remains of Celtic ornaments, such as beads, buckles, and brooches in amber, wood, and gold; one of which, for its elegance and appropriate form, is at once a proof of the nobility of the person for whom the barrow was raised, and the elegance of the arts at the period of the interment, about 3,000 years from the present period. The shape of this curious article is conical, and the exact form of the barrow itself, which it was most probably intended to figure. Conceive a piece of wood, imbricated in layers, one over the other, to the summit of the cone, and covered with thin plates of pure gold, and adorned with circles round the middle, and near the bottom with a triangular festoon about the lower edge, in which are two holes for a thread or wire to suspend it.

STACKHOUSE, YORKSHIRE.

[1784, *Part II.*, pp. 961-963.]

It is much to be regretted that the great protoparent of antiquaries did not visit, in his extensive excursions, this part of Craven, in which are many curious antiquities that are yet buried in oblivion, especially some of them, which, it must be acknowledged, are so reclusive as to admit of no speculation from our modern tourists. I

therefore once more give your readers what may excite the attention of an abler pen.

The sepulchral barrow has upon all occasions awakened the curiosity of the antiquary and the public in general, which may be witnessed from the many spectators present upon opening those venerable relics. A kind of respectful veneration naturally inspires even the ignorant rustic during the operation. The Rev. Mr. Hutchins, in his "History of Dorsetshire," pleasingly remarks, "Thus we see, all nations, however differing in language, customs, or manners, showed a religious regard for their dead. The venerable Druid, the civilized Roman, the barbarous Dane, alike observed the rites of sepulture; whether deposited under the lofty pyramid, mixed with their mother earth, or reduced to a handful of ashes, covered with a heap of turf,* the deceased alike employed the pious care of their surviving friends, who wept over and buried them. And these rites, founded in nature, were supported for the encouragement of the living, not with a view of benefiting the dead."

But the sepulchral tumuli frequently, when searched and examined with the nicest accuracy, rather confuse and embarrass the searchers, unless the appearance of coins, instruments, trinkets, or other national appurtenances, clear the difficulty. This evidently proceeds from the exact similitude between those of the four early nations. Indeed, it has with some degree of propriety been urged that the two latter, the Danes and Saxons, left off the custom of burning their dead immediately after their leaving their own countries; and, were it not asserted by such reputable and judicious authors, it appears rather improbable, on considering that domestic or national customs are so riveted and unalterable that, though they may appear evidently ridiculous, it is impossible for many ages to root them out. It has also been observed that the Romans and Britons always burnt their dead; but it is certain they did not always (though they might in general), since it is beyond dispute that entire skeletons and perfect bones of Roman generals have been found. . . . This barrow, or tumulus, stands in an elevated situation, upon a mountain, above the hamlet of Stackhouse,† and may be discerned at a great distance. It is known in the country by the name of The Apronful of Stones, from a ridiculous tradition that the devil flying over the hill to build a bridge near Kirkby Lonsdale, in Westmoreland, his apron-string broke, and he dropped this vast heap.‡ Some other curious legendary tales are told also on this occasion.

* Weever, in his "Ancient Funeral Monuments," p. 6, says this was the custom of our Saxon ancestors; but he does not remark whether they burnt their dead or not, which it is probable they did not; neither did they always form their tumuli of earth.

† Stackhouse was originally an appendage to Furness Abbey, Lancashire.

‡ A like story is given in a tour to the caves in this part of Yorkshire.

The form of this vast mass is circular, or rather orbicular ; the height, by computation on the spot, about 9 or 10 feet. It is composed of an incredible quantity of stones, piled in such a manner as to rest upon each other's basis, and strengthened by its conic form, it rises upwards in this curious shape. Those stones that form the outside of the work are so small that a soldier could carry them ; and since it has been argued that such a monstrous work as this would not be attempted by any nation, but was natural, the largeness of the tumulus may easily be accounted for, since they were annually increased out of reverence, as Mason evinces in his "Caractacus," where he introduces him soliloquizing on his son Arviragus's body :

— Posterity
Shall to thy tomb with annual reverence bring
Sepulchral stones, and pile them to the clouds.

This barrow had been opened many years ago, and it is represented in the plate in the state in which it has appeared till lately. Some old people in the neighbourhood remember its being entirely complete, and having a very flat top. It was usual, in finishing these works, to lay a flat stone at the top. The people that opened it left their intention unfinished, only throwing down the lid of the stone coffer, and one or two of the sides ; and, meeting with nothing worth digging for, they left it. Upon examining it in this state, before its being entirely disfigured in the last attempt, I found several human bones scattered up and down therein, amongst which I selected the patellæ of the knee, the vertebræ of the spine, part of the jaw, and several teeth. Round the area is a wall or rampart, of the same materials as the outside, its height from the interior part about 2 feet, irregularly ranged with fissured remnants. In the centre of the cavity or area is the above chest, consisting of several huge stones of vast magnitude and density, fixed firmly into the ground, which supported a lid of equal size, though it is now thrown off the top. In this chest are partitions, for what purpose is not known, unless each space was allotted to its particular relique or body. In the partitions and sides of the coffin is a kind of hole in the edge, with a rude mould. Not many weeks ago, the curiosity of some of the neighbourhood was excited to investigate this stupendous work of art, and accordingly labourers were hired, when, upon searching a day (yet not half the work done), a human skeleton was found, in due proportion, and in a fine state of preservation, excepting the skull and one of the limbs, which were moved out of their place by the workmen's tools. A small circular piece of ivory, and the tusk of an unknown beast, supposed to be of the hog genus, was also found ; but no ashes, urns, coins, or instruments were discovered. There is a tradition (if mere tradition may be relied upon) that this was raised over the bodies of some of the Danes slain in the general massacre

of that nation. However, from collecting all circumstances, as there is no appearance of ashes, it is supposed to belong to them or the Saxons. This is, however, what I wish to be acquainted with. Such a conspicuous work must certainly be erected to the manes of some chiefs, though there is no ground to support its origin but a mere tradition. The tumuli of the Romans and Britons have frequently a black friable earth round their foundation ; but this has not, neither is there any appearance of the operation of fire in its cavity. In the "Archæologia," vol. iii., art. xxviii., an extract of a letter from the Rev. George Low, mentions the opening of one of the numerous tumuli in the Links of Skail, in the Orkney Isles, in which was found a well-preserved skeleton, within a coffin or chest composed of four stones, covered by a fifth. He observes, "Little can be said as to the antiquity of this tumulus, only that it was made before the introduction of Christianity." The insertion of this extract is only meant to compare it with this, and to assert the original reasons. And as the present century can honestly boast of a greater fund of antiquarian knowledge than any of the preceding ones, and this noble science, which, in the days of ignorance and superstition, used to be considered as despicable and ridiculous, is now esteemed not only honourable, but altogether useful and necessary, being ornamented by the labours of genius : thence, in this enlightened age, may the adepts in antiquity have their doubts resolved, and the ignorant meet not only satisfaction, but pleasure and instruction.

W. F.

GRISTHORPE, YORKSHIRE [see *ante*, pp. 81-86].

[1834, Part II., p. 195.]

July 12.—A barrow was opened, in a pasture near Gristhorpe Cliff, about six miles south of Scarborough, on the estate of William Beswick, Esq., wherein, at the depth of 8 feet, a sarcophagus was found, laid horizontally north and south, excavated, in two pieces, out of the trunk of an oak, and measuring $7\frac{1}{2}$ feet in length by 3 in diameter. This primitive sepulchre contained a skeleton, quite black, the bones disunited (but very perfect), of a man upwards of 6 feet in height, and seemingly beyond the middle age, wrapt up in the remains of the hide of some large animal (probably an ox). The brass point of a spear, with a curious sort of plate made out of the bark of some tree, and several bone pins, were found among these bones. The whole were, by the liberality of Mr. Beswick, deposited in the Scarborough Museum.

[1834, Part II., pp. 632-635.]

The opening of this tumulus, the contents of which proved of more than usual curiosity, was briefly noticed in our number for August, p. 195. An intelligent pamphlet on the subject has since been published by Mr. William Williamson, son of the curator of the Scarborough Museum, from which we make the following extracts :

On Thursday, July 10th, a large barrow or tumulus was opened at the village of Gristhorpe, near Scarborough, by W. Beswick, Esq., the owner of that estate. This gentleman, some years ago, opened two others near the same site; in both of them urns, with imperfect remains of bones and ashes, were found, which were pronounced to be of Anglo-Saxon or Roman origin. Last year he proceeded to examine the tumulus which forms the subject of this pamphlet, but, after sinking to some depth fruitlessly, he discontinued it. On the day named, however, in company with E. Alexander, Esq., of Halifax, he recommenced his search, and at the depth of about 6 feet from the surface the spades struck against a hard substance, which proved to be a quantity of oak-branches loosely laid together. These being removed, an immense log of wood, situated north and south, 7 feet long by 3 broad, shortly afterwards presented itself, to the great satisfaction of these antiquaries. At one end of the log was a rude figure of a human face, from which circumstance, connected with its large size, they were led to believe that they had discovered one of the Druidical remains of the Ancient Britons. On the following morning, a number of gentlemen attended to witness its removal from its argillaceous sarcophagus; which, after considerable labour, was partly effected, and a most remarkable appearance displayed itself. The log, as they thought, seemed to have been broken by the force employed; but on the fractured portion being lifted up, it was found to be the lid of a coffin, the lower part still remaining in the clay, containing a quantity of fluid, in which a human skull was visible; and on the water being thrown out, it was soon found that the coffin contained a perfect skeleton. The bones were carefully removed, the other contents of the coffin examined, the lower part taken up, and the whole conveyed to the Scarborough Museum.

The coffin has been made from the trunk of an oak,* roughly hewn at the extremities, and split most probably by wedges, or such similar rude instruments as were then possessed. The external bark is still in good preservation; and a species of lichen upon it was at first beautifully distinct. That so minute a vegetable should have existed so long is truly surprising. On the bark is carved the rude imitation of a face, before alluded to. There is a remarkable circumstance attending it, viz., that this face was placed at that end of the coffin where the feet of the skeleton were laid.† Unfortunately it was a little damaged by removal. The outer bottom of the coffin was in length 7 feet 6 inches; its extreme breadth, 3 feet 3 inches.

* "Ingentem quercum decisus undique ramis,
Constitutum tunulo."—Virgil, *Aeneid* [xi. 4].

† To judge from the plate, this face is by no means evident. An antiquarian friend suggests that it was intended for a head; not of a man, however, but of a spear. The ancient Roman spear is described by Polybius as *round*, and a palm in breadth. For our own part, we must own that, if no features are actually

At the bottom, near the centre, is an oblong hole about 3 inches long by 1 wide, which passes through the coffin, and has most probably been intended to carry off any fluids arising from the decomposition of the body. There is little difference in size and general appearance between the lid and the body of the coffin. There are not the least traces of any resin, or indeed anything, having been used to fix the lid; it appears to have been loosely laid on, and kept together only by the uneven fracture of the wood corresponding on each part when brought into their proper situations.

The first thing seen on opening the coffin was a human skeleton, quite perfect, and of an ebony colour. The bones are much larger and stronger than those of a more recent date, exhibiting the lines and ridges for the attachment of muscles with a degree of distinctness rarely if ever witnessed at the present day. But the most remarkable portion is the head, which is beautifully formed, and of an extraordinary size. The superciliary arches are unusually prominent, and the depression immediately above them must have given the countenance a singularly wild appearance. The thyroid cartilages of the larynx, the ensiform process of the sternum, and the teeth, are in beautiful preservation. The former appear ossified; the latter are extremely regular, but much worn and flattened by mastication, from which, together with other circumstances, we may infer that he had been advanced in years. Two of the vertebrae of the neck are ankylosed, which some consider as another proof of his great age, although this phenomenon may have resulted from disease. The body has been laid on its right side, with the head to the south, and its face turned towards the rising sun. It has evidently been wrapped in the skin of some animal, the hair of which is soft and fine, much resembling that of a sheep, or perhaps still nearer that of a goat, but not quite so long. This skin has been originally fastened at the breast with a pin of horn or bone. The skeleton has been articulated, and it now measures rather more than 6 feet 2 inches in length; and the interior of the coffin being only 5 feet 4 inches, will account for the disordered state in which the lower extremities were found, which must necessarily have been doubled up so as to admit of being placed within it.

The weapons, etc., consist of the head of a spear or javelin (Fig. 3), formed of brass or some other composition of copper, on which time appears to have exerted considerable influence, as it is much corroded, and has evidently lost a considerable quantity of metal at the point. At the broad end are two small rivets, which have doubtless been used to attach the head to a shaft, which, from the shortness of the rivets still remaining, must have been broad and thin.

perceptible, we think the cavity was made merely by way of handle, for the purpose of drawing the lid of the coffin off and on, previously to the interment.

Fig. 4, the flint head of, as it seems, a small javelin; for had it been intended for an arrow, as some have supposed, its crooked form would have thrown it out of its straight course on being discharged. The under-surface is perfectly flat, and they have probably given it that bent point to form a more ragged and dangerous wound.

Fig. 5 is a beautifully formed ornament of either horn or the bone of some of the larger cetaceous tribe of fishes. The under-side is hollowed out to receive some other appendage; and there are three perforations on each side for the purpose of fastening it by means of pins. It has probably been the ornamental hand of a javelin,* of which the metal head has formed the opposite extremity. Its symmetrical form would not disgrace the most expert mechanic of the present day, which, combined with the gloss upon it, gives it quite a modern appearance.

Figs. 6 and 7 are rude heads of arrows of flint. It is rather difficult to say how the larger one has been fixed, but the smaller one has most likely been inserted deeply into a shaft, so as to present only a small portion of the sharp point.

Fig. 8 is an instrument of wood. The point is not sharp, but round, and flattened on one side to about half its length; the opposite extremity is quite round.†

Fig. 9 is another pin of the same material as the handle of horn or fish bone above mentioned. It was laid on the breast of the skeleton, having been used to secure the skin in which the body has been enveloped.

Fig. 10 is one of the fragments of a ring, the other portion of which is more broken. It appears to be of horn, and has been composed of two circles connected at two sides. It has been too large for the finger, and, being rather of an oval form, has most probably been used for fastening a light scarf over the shoulder, which has been described by some authors as an appendage to the dress of an Ancient Briton.

By the side of the bones was placed a kind of dish, or shallow basket of wicker-work: it is of a round form, and about 6 inches in diameter; the bottom has been formed of a single flat piece of bark, and the side composed of the same, stitched together by the sinews of animals; which, though the basket fell in pieces on exposure to the atmosphere, are still easily to be observed in the fragments and round the edges of the bottom. Attached to the bottom is a quantity of decomposed matter, which has not yet been analyzed. The

* A javelin, the shaft of which was very thin, and broke when the object was wounded, hung down and encumbered the enemy, but could not be returned by him offensively. This was the nature, we believe, of one sort of the Roman pilum.

† It appears to be a knife, very much like one of those used by the Egyptian embalmers.

most likely opinion concerning this basket is that it has contained offerings of food, either for the dead or as gifts to the gods.

Laid upon the lower part of the breast of the skeleton was a very singular ornament, in the form of a double rose of a riband, with two loose ends, but of what it is composed is uncertain; it appears to have been an appendage of some belt or girdle, but, like the basket, it fell into small fragments immediately on removal. Its composition is exceedingly brittle, something resembling thin horn, but is more opaque and not elastic: the surface has been simply though curiously ornamented with small elevated lines.

A quantity of a vegetable substance, which was at first believed to be dried rushes, was also found in the coffin. Some of it has since been macerated; and though the greater portion of it is so much decomposed that nothing but the fibre remains, in one or two instances the experiment has been so far successful as to clearly distinguish a long lanceolate leaf, resembling that of the mistletoe, which plant it has most probably been: a few dried berries were amongst the vegetable mass; they were very tender, and most of them soon crumbled to dust: they are about the size of those of the mistletoe.

In the vignette are represented the three tumuli, viewed from the land side, with Flamborough Cliff on the right hand.* The centre one is the subject of this notice, and those on each side the two previously opened.

The artificial elevation of the tumulus under notice does not appear to have been very great, as a rising ground has been chosen to work upon: the diameter of the artificial part is about 40 feet, but at its extreme height the soil thrown up has not been above 3 feet in thickness. The following is a table of the interior of the barrow, descending from the surface: Vegetable soil, 1 foot; loose stones, 2 feet; clay, etc., 1 foot; loose stones, 1 foot; puddle, or blue clay, 1 foot; oak branches, about 1 foot; the coffin, 3 feet; solid clay, —. The greater part, if not the whole, of the upper surface of the soil has come there naturally from vegetable decomposition; and precisely resembles the soil in other portions of the same and adjacent fields. Both the seams of stones have been thrown loosely in, without any appearance of paving or regular deposition. In the lower seam the clay beneath has been soft, as some of the stones have sunk into it, and has been either mixed with some substance to give it a different colour, or brought from some other place, as there is nothing in the immediate neighbourhood resembling it. The stones are all of them boulders, principally sandstone, and most probably collected from the neighbouring lands. The oak branches have been carelessly thrown

* The locality reminds us of the description of Ossian, "Their green tombs are seen by the mariner when he bounds on the waves of the north."

over the coffin ; are from 5 to 8 inches in diameter, and, like the coffin, are still covered with the rough bark. One only was placed perpendicularly at the foot of the coffin, apparently to steady it. The sides and bottom of the pit are formed of the natural clay of the diluvium, which has never been disturbed.

Now, from these facts we are enabled to form a very probable conjecture of the period of the coffin's interment. The absence of all pottery proves it to have been prior to urn burial, and consequently before the Roman invasion ; and the presence of the single brass spear, to be after the introduction of the islanders to the more wealthy and civilized Phœnicians. These, combined with the rude weapons of flint, immediately prove the entombed to have been one of the aborigines of the soil ; and that this opinion may not appear to be too hastily formed, a few references to some works of standard repute on the subject may be offered. One great proof of its high antiquity is the envelopment of the body in a strong skin, which has doubtless been a part of the dress of the man when living. Dr. Henry, in his "History of Great Britain," says, "The first garments of the ancient Britons, and of many other ancient nations, were made of skins : as they lived chiefly on the milk and flesh of their flocks, it was most natural and obvious to clothe themselves in their spoils. These garments, in the most ancient times at least, did not consist of several skins artificially sewed together, but of one skin of some of the larger animals, which they cast about their shoulders like a mantle." Cæsar in his "Commentaries," speaking of the Britons, says, "The greater part of those within the country live on flesh and milk, and go clad in skins."

Tacitus says, "The mantle was fastened upon the breast, or one of the shoulders, with a clasp, or, for want of that, with a thorn or sharp-pointed piece of wood ;" which corresponds with the long pin of horn. By the mantle's being pinned at the breast, it could not also want fastening at the shoulder ; consequently some other article of dress must have been worn, which, from the size of the ring, could only have been a kind of ornamental scarf.

The spear in the coffin, I should say, has been of foreign workmanship, as the early ones of the Britons were more heavy, and bore a resemblance to their clumsy weapons of stone ; but this has been of light and elegant workmanship, which is another evidence of the great antiquity of the tumulus. The rude form of the coffin, and the selection of the oak, the sacred tree of the Druids, are also other confirmations of his being one of the aborigines : the oak has, from the great thickness of the marks of each stroke (which are all still distinct), evidently been cut down, and the interior hollowed out with chisels of flint about two inches in width : the interior must have cost them much trouble in forming, both from the size of the tree and the hardness of the wood. The tree itself has been cut down

with some much larger tool, the marks of its strokes are 3 inches in length.

In the basket we have a specimen of the earliest manufactured exports of this now manufacturing island. The British "bascaudæ" are frequently mentioned by Cæsar and his contemporaries, and were purchased by the Romans at extravagant prices.*

Of the mode of burial, only one similar example has been recorded, which was in a tumulus opened by Sir R. C. Hoare, I think in the neighbourhood of Stonehenge, where the body was deposited in the trunk of an elm.

"The Britons," says Strabo, "exceed the Gauls in stature, for I saw some young Britons at Rome who were half a foot taller than the tallest men;" and this well accords with the size and characters of the skeleton. He has been of a remarkable stature; I should say not less than 6 feet and 3 or 4 inches:† so that his great size, combined with large muscular attachments, must have given him that immense strength necessary to support him in the laborious pursuits of war and the chase.

The water contained in the sarcophagus was identical with the ordinary spring-water of the vicinity, and contained much sulphate of lime, but no appreciable animal matter or tannin. Floating upon this water, and sparingly sprinkled along the under edges of the lid, and penetrating even the fissures, etc., of the decaying wood, adipocere occurred in a singular flocculent or rather pulverulent form of a white colour, differing from its more usual appearance in consequence of partial decomposition, resulting without doubt from its vast age, and the peculiarity of being enclosed in such an antiseptic case.

A series of experiments, which met with the sanction of Professor Traill, of Edinburgh, of Dr. Henry, of Manchester, and of Dr. John Murray, of Edinburgh, ascertained this white matter to be a singular variety of adipocere, which likewise proved that the actual body of this Ancient Briton had been deposited, and not merely the bones.

On his return from the British Association at Edinburgh, Dr. Buckland met with the author of the preceding paper, and was immediately struck by his details of a discovery which he justly felt to be the most curious and important that had ever fallen under even his observation. "A more authentic case of the British mode of burial (the Doctor truly remarks in a letter addressed to the editor of the *Literary Gazette*), it is impossible to find. The extraordinary,

* Boxes and canoes of birch-bark are still made by the Indians of the Isle of Cape Breton.

† This thigh-bone (*femur*) measures 19½ inches. The thigh-bone shown at Tavistock as Ordgar's, the gigantic heretoch of Devon, measures 21 inches. Our friend A. J. K. himself saw one thrown up casually in West Wickham Churchyard (which he suspects was a British locality, Sept. 1832), which measured 20½ inches.—[Cf. Beddoe's "Races of Britain," p. 17.]

and, as far as I know, unique condition of the bones, preserved by tannin and converted to the colour of ink, has resulted from the tannin and gallic acid which was in the green oak trunk that forms the coffin, and in its very thick bark. The conversion of the flesh into adipocere must have been occasioned by the ready admission of water through the line of junction of the lid with the body of the coffin, or through the hole cut in the bottom. The clay placed in contact with the body probably contained sufficient iron pyrites to afford the sulphate of iron, which, uniting with the tannin and gallic acid, have formed, together with the water within the coffin, an ink of precisely the same materials as that in common use."

SCARBOROUGH.

[1835, *Part II.*, p. 540.]

An ancient British cairn, or tumulus, has been just opened on the high road to Filey, near Scarborough. It was found to contain the skeleton of a man, an urn with ashes, and a drinking-cup, also of clay, both figured on the outside, a flint head of an arrow, and a hammer of whinstone. The body was crushed into a very small space, so that the knees nearly touched the chin. Mr. Gage, Treasurer of the Antiquarian Society, superintended the opening of the tumulus. The bones were so brittle as to fall to pieces immediately they were exposed to the air and touched. Mr. Tindall has presented the contents to the Scarborough Museum.

[1836, *Part II.*, pp. 416-418.]

An account of the discoveries in the British tumulus near Scarborough, the opening of which was briefly noticed in our number for November, p. 540, has been written by William Travis, M.D., of that town, in a letter to Sir John V. B. Johnstone, Bart., M.P., President of the Scarborough Philosophical Society; and, having been read to the Council of the Scarborough Museum, is now published at their request: accompanied by two plates representing the various antiquities discovered, and the situation of the tumulus, on a spot which affords a very commanding view of the town and bay.

From this publication we make the following extracts:

"It was of the class denominated by Sir Richard C. Hoare, from its shape, the Bowl Barrow. It was 30 yards in circumference, at its base; and was one of four, near to each other, situate about a mile and a half from Scarborough, and not more than four or five hundred yards from the sea cliff. The site, until about forty years ago, was an open common or pasture, belonging to the Corporation, and known by the name of Weapon-ness, a designation seeming to indicate its having been, at some remote period, the seat of warfare; but no tradition exists of the origin of its ancient name. It is at present in tillage, and adjoins the west side of the road to Bridlington."

Some large trenches having been made across the barrow, "at the depth of about three feet from the apex, the loose covering stones of a cistvaen were exposed, occupying a space of 9 ft. 6 in. from north to south, and 8 ft. from east to west. Near the south-west corner of this pile of stones was an inverted urn or vase, containing ashes and calcined human bones deprived of gelatine; and in this urn were likewise a stone hammer and a flint head of a spear. The vase is 1 foot in height, and is very similar to the sepulchral urns found at Codford, Winterborne Stoke, and Stonehenge, figured in Hoare's "Ancient Wiltshire," plates viii., xiii., xvi. The urn being found nearer to the surface than the apex of the cistvaen, furnishes a decided proof of its having been a *secondary* or subsequent deposit; and it is evident that the contents of the urn, where the subject (the corpse) had undergone *cremation*, were distinct from those of the cistvaen, in which the deposit was found *entire*.

"The pile of loose stones, arranged in somewhat of a convex form, was next removed; and, at the depth of 2 ft. the tomb was exposed to view. It was constructed of stones placed on edge upon clay; and, taking the dimensions from within, the length was only 3 ft. 8 in., the breadth 1 ft. 8 in., and the depth 15 in. Within this very confined space had been thrust the personage intended to be thus honoured and commemorated! The length of the bones of the thigh showed them to have been those of a man above middle stature. The head was laid to the south, reclining on the right side, with the knees drawn up to the breast, which has been held to be the most ancient position.

"On the left of the head was discovered, in a perfect state, one of those smaller vessels which Sir R. C. Hoare denominates drinking-cups. The figures in plates ix. and xii. of his 'Ancient Wiltshire,' approach the nearest to the one found in the tumulus; but that engraved in Gough's 'Camden,' vol. iii., pl. 33, and found near Clonmel, is exactly its counterpart. The rude pattern figured on this earthen vessel, and that on the sepulchral urn, are so far of the same character, that the deposits may both be pronounced to belong to the same age and people. Our drinking-cup is in height 5 in., in width at the top, including the brim, 6 in., within the brim 4½ in., and the diameter of the base 3 in. It was more than half filled with a dry coarse powder, of a dark brown colour, with a reddish tinge, and intermixed with numerous very small but distinct fragments of woody branches. By the accurate and scientific investigation of Dr. Murray, the result of a rigid chemical analysis proved that the entire contents were of a vegetable origin, though in general so extremely carbonized as not to afford any plausible conjecture of their former specific character; and, indeed, so slightly altered was the structure of the woody fibre, that the carbonization may, in the doctor's opinion, be referred to the long-continued action of water, rather

than to the more destructive agency of fire : and, more especially, as the analysis detected the presence of resin in a minute proportion. The form of the cup, which is in excellent preservation, is not inelegant ; and this vessel, together with the sepulchral urn (unfortunately fractured, and in part destroyed), the ashes, the stone hammer, and spear-head, are now placed in the Scarborough Museum ; where are also preserved the very singular oak coffin, the skeleton, etc., from the barrow opened at Gristhorpe in July, 1834, and fully described by Mr. W. C. Williamson, with an engraving, in our vol. ii., p. 632. [See *ante*, pp. 81-86, 154 161.]

Dr. Travis closes his memoir with observing that from an attentive consideration of the remains, and from other similar discoveries to which he refers, "I have satisfied myself that the Scarborough tumulus is to be accounted one of the ancient British barrows, and such, I may add, is the opinion of Sir Richard Colt Hoare, and of Mr. Gage. The latter gentleman, from the absence of all metal, even conjectures it to be of more ancient date than the celebrated barrow at Gristhorpe."

We have now to add, that in consequence of this concluding remark, Mr. W. C. Williamson, the author of the memoir to which we have already referred (and now Curator to the Natural History Society of Manchester) has addressed to us the following observations :

"In the second edition of my memoir on the Gristhorpe tumulus, I expressed my conviction that the barrow last opened was of a more modern date than the Gristhorpe one, and as an opposite view of the subject is taken by Dr. Travis,* I feel myself called upon to give the reasons that induced me to adopt such a conclusion.

"This opinion, promulgated by Dr. Travis, is founded upon the fact of no metal having been found in the interment. Now, this does not appear to me so clear an evidence, as to convince me of the greater antiquity of the Scarborough tumulus. The presence of metal gives us with a degree of certainty the most ancient date at which an interment could be formed ; but the absence of it does not so clearly define the most modern limit, and I think the absence of metal in the present instance may be accounted for in other ways : but if Dr. Travis's opinion be the correct one, the Gristhorpe tumulus is reduced to a more modern date than most of those of the Wiltshire Downs, and the whole of the argument advanced in my pamphlet in support of its high antiquity becomes a fallacy.

"I should in the first place say that the individual whose remains were found in the Scarborough tumulus had never been of a rank and importance equal to the Gristhorpe chief. The interment in the

* "The opinion is given as that of Mr. Gage, Director of the Society of Antiquaries of London ; but, as the author expresses no conviction to the contrary, I suppose it to be also his own."

kistvaen is the least important and laborious of all the *honorary* burial rites. The single utensil found by his side was not of such a nature as to prove any extraordinary rank. Now the Gristhorpe tumulus was of a very different nature : the labour of hollowing out the oaken coffin must have been immense, and would not have been employed except in a case where the highest honour was intended. The systematic manner in which the coffin was covered with alternate layers of oak branches, clay, and stones, implies a greater degree of care employed than was exhibited in the covering of the kistvaen at Scarborough. To me the fact appeared evident, that the Gristhorpe chieftain had been a person of higher rank and importance than the one at Scarborough, or the generality of those on the Wiltshire Downs, where a similar mode of interment has been adopted.

"There can be no doubt that the Phœnicians first introduced metal and earthenware amongst the aboriginal Britons, and that the introduction took place from six to nine hundred years before the Christian era. The non-existence of brass, then, according to Dr. Travis's conclusion, would be a proof that all tumuli not containing such metallic weapons or ornaments were formed prior to that date ; a conclusion totally different, I believe, to any that Sir R. Colt Hoare, the most diligent investigator of the history of the earlier Britons, has arrived at. If the person entombed in the Scarborough tumulus was a character of inferior rank to the Gristhorpe one, the value and scarcity of metal would prevent the former from obtaining possession of it ; or if he did so, its value would be too great, and he of too little importance to admit of the metal being buried with him. Besides, it does not appear evident that the body found in the kistvaen was either a warrior or a hunter, the two professions chiefly that would require metals as such an important part of their outfit ; so that the absence of metal does not prove much, as weapons, to which purpose the metals would be chiefly applied, are *altogether* wanting in the primary interment, and I think that no one would suppose the second interment, one by cremation, to have been formed before the burial of the Gristhorpe chief.

"If, then, the absence of metal does not form any argument, let us examine the only utensil found in the kistvaen, the earthen drinking-cup, which contained a considerable portion of vegetable substance, originally, in all probability, some kind of food. In the Gristhorpe coffin was found a rude dish containing a similar substance, probably placed there with a similar motive. Here the dish was *not of earthenware*, but (what I think proves a far lower state of an acquaintance with domestic comfort) of slips of bark stitched together with sinews of animals, a utensil which would never have been used for such a purpose by a people acquainted with the art of ornamental pottery, which was evidently known at the time the Scarborough tumulus was formed. The fact appears to me conclusive, and must, I think,

do so to all who view the subject carefully, that the Gristhorpe tumulus is of an older date than the one recently opened at Scarborough.

Yours, etc. W. C. WILLIAMSON.

CLEVELAND.

[1844, *Part I.*, p. 188.]

In November last a number of gentlemen met on one of the Cleveland hills called "East Nab" (which commands a beautiful view of the river Tees and the surrounding country for many miles), in consequence of permission being obtained of the Lord of the Manor, Mr. Martin Stapylton, to excavate two tumuli, situated on the ridge of the mountain. They proceeded to investigate the western mound, which they found to be composed of small stones, slightly intermixed with earth, and having with much labour dug to the depth of about a yard and a half, they struck upon an immense stone, measuring upwards of 7 feet long by 4 feet wide, and from 10 to 12 inches in thickness, weighing about a ton, shapeless and unhewn. This, by the aid of handspikes (obtained from a neighbouring quarry), was placed on one edge, when a hollow presented itself, of a grave-like appearance ; but it contained neither skeleton, urn, coin, weapon, nor any other relic of antiquity. After clearing away the loose stones by which the slab was supported, the workmen struck upon another flat stone of immense size, but from the dangerous position in which they were placed it was deemed unsafe to proceed any further. They next directed their attention to the eastern tumulus, distant about forty yards ; proceeding in the manner before described, by digging in depth about a yard and a half towards the centre. It was found to differ widely from the former one in the materials of which it was composed, consisting chiefly of white loamy soil. After three hours' labour they approached its centre, and on removing a flat stone found an urn, containing a great quantity of human bones and teeth, the latter in excellent preservation. It was in height about 16 inches by 12 inches in diameter, composed of burnt clay, upwards of half an inch in thickness, and in colour resembling a common tile ; it had a broad rim round the top, and its sides are marked in a curious manner by the point of some sharp instrument. In turning over the mound innumerable small heaps of burnt wood, or charcoal, were thrown up. Some fifty yards due north of the tumuli is an encampment of a semicircular form, and of considerable extent.

MID-CALDER.

[1844, *Part II.*, p. 533.]

On clearing away some earth from an old barn-yard, connected with the farm of Broom Park, in the neighbourhood of Mid-Calder, a

great number of stone coffins were found a few feet below the surface of the ground. On removing the lids the bodies were found in good preservation, the principal bones being perfectly entire. They appear to have been placed in their coffins without any kind of covering, as no habiliments of any kind, or anything to indicate their rank, condition, or occupation in life, could be discovered. The coffins consist of slabs of stones got from the river, rudely put together and constructed on the spot.

EXTWISTLE.

[1842, *Part II.*, p. 413.]

An interesting discovery has been made by Mr. F. C. Spencer, of Halifax, of a British barrow, in the township of Extwistle, near Burnley. Mr. Spencer's attention had been called by Mr. Jonas Lee, farmer, of Thursden, to a small circle of stones in a field called Delf-hill Pasture, at Hellecough-head (*Hell*, Ang.-Sax. a grave), which, on examination, Mr. Spencer perceived to have been a place of British sepulture. The circle originally consisted of rock pillars (five of which remain), standing about 18 inches above the surface, and being about 2 feet square. The diameter of the circle is about 5 yards. Mr. Spencer directed an excavation to be made without delay, the result of which was the discovery of two very antique earthen urns, curiously marked, containing fragments of human bones, of small dimensions, mixed with charcoal and black mould. The tops of the vessels were covered with small flat slate-stones, but little larger than the urns, over which larger heavy stones were placed for their protection. The urns were found about 2 feet beneath the surface of the field, in the centre of the circle, embedded in soft clay, with many pieces of charcoal interspersed. About 300 yards from the barrow are the bold remains of a British circular camp, which determines the character of the urns, the Roman encampments being square.

SWINTON.

[1863, *Part I.*, p. 481.]

The tumulus on the heights above Swinton, Yorkshire, which was partly explored in November last by a cutting from the north side, was again investigated at the close of December by the same parties. The barrow measures 26 yards in diameter, and nearly 4 feet in height. About a foot and a half below the summit a blue, and what geologists would call Kimmeridge-like, clay was reached, the depth of which, as measured, was 3 feet 10 inches, and placed undoubtedly as an expedient to prevent percolation of surface water. The same kind of clay, it appears, is found plentifully in the vale on the north side of Swinton. Immediately below the clay there was discovered a floor of tiles systematically arranged ; these tiles are perforated at one of the ends with a hole to admit a nail, evidently

showing that the tiles had been in use previous to their occupying the unusual form within the tumulus. They are of a rude form, and appear to have been made from the slate of the lias formation. Below the tiles, which were about on a level with the adjoining fields, there seemed to be the ordinary surface soil, but intermixed with various sized blocks of Hildenley stone, charcoal, and fragments of glazed pottery. The opening was much enlarged on this occasion, not only exposing a beautiful section, but also showing that the barrow had originally been excavated below the surface, but without meeting with a perfect urn or incense-cup. A very beautiful bronze needle was found in the previous opening, on reaching the centre. Some vegetable remains were found in the tumulus, which appeared to be nothing more than the stones of the fruit of the common thorn.

Antiquities in Scotland.

[1771, pp. 496, 497.]

We know so little about the antiquities of Scotland, and the Scotch themselves are so remiss in their inquiries after them, notwithstanding the excellent materials collected by their eminent antiquaries of the last age, and yet preserved in the Advocates' Library at Edinburgh, that, if you have no objection to inserting it in your useful miscellany, I here offer you an abstract of a letter communicated to the publisher of the *Scot's Magazine*, and printed in the number for February, 1758. The compilers of the *Scot's* and *Edinburgh Magazines* make up their volumes with pieces from yours and others ; and why should not you for once make as free with their articles of intelligence, to preserve and extend knowledge ?

D. H.

"It is well known that in all the western parts of Scotland, bordering on the Highlands, are almost upon every considerable eminence the remains of some fort, tower, or whatever else you may please to call them ; for they are very ancient, and people are much divided about their use. Some of these have been made of earth, others of stone. The gentlemen near Stirling, making a useful road across the country from Doune to Kippen, materials being scarce, broke up one of these stone places, which was pretty entire, though covered with earth. Before it was opened, it looked like a hill, hollowed out in the top. The workmen found some substances of different shapes and sizes, the larger round, and about four inches diameter, all concave on one side, and convex on the other, smooth and shining on the convex side, green, studded with drops, as of black glass, about the size of half a pea, and set in rows. They were all broke to pieces, and said to be of earth and stone ware. After removing the rubbish, they came to a circular wall of round stones, 15 feet thick at the foundation, and gradually thinner upwards. The middle of this rotunda was laid with causay, as was a large area

on the outside. In taking down the wall, they came to a door, not ten inches wide, and twelve or fourteen feet high. On each side of it was a hole in the wall, as for a bolt, a foot square, and about three yards long each way. At one end of the cavity, four flag-stones on edge, forming a chest, containing bones of animals, one like the jaw of a hare. Among the bones were three triangular pieces of copper, of the size of a halfpenny, all broke by the labourers. One third of the rotunda is still standing. A gun-shot from it is an artificial hill of earth. The proprietor, intending to plant it with trees, had it dug into, when it was found full of urns, some with inscriptions, not legible; on which they desisted."

Your readers may compare with this account a letter from the late Baron Clark to Mr. Gate, printed at the end of Gordon's "Itinerarium Septent.", p. 169, where he mentions such a hill or cairn, with a stone coffin in Pennecuic parish, in Midlothian, and another with urns in the west of Scotland.

ON PICTS' HOUSES.

[1863, Part I., pp. 217, 218.]

Having read the short notice in your last number of Mr. G. Petrie's memoir "On the Structures called Picts' Houses," which was communicated to the Archaeological Institute on December 6th last, I beg to say that I apprehend the word "houses" is only a corruption of "houes," or rather "howes." The word in the singular number is "howe," which signifies the same as "haw," and means "a hill" or "mound;" and in the old Scandinavian language it is "haug," or "houhr;" it is in this sense used as a sepulchral tumulus or barrow. And Mr. Farrer's interesting work on "Maes-howe," which he so ably investigated in one of the Orkneys, corroborates this opinion. "Maes" signifies "an open field," "a plain," or "level ground" (see Gibson's "Camden's Britannia," 2nd ed., vol. ii., pp. 810, 826), and "howe" "a mound;" so "Maes-howe" means "a mound on a plain." Again, the word "maes-lough" is interpreted "a lake in a plain."

The paper, likewise, in your same number, pp. 22, 27, proves this view of the etymology of "houes;" and these structures are not unfrequent on the Cleveland hills of north-eastern Yorkshire. Indeed, in some instances I know that in that district the natural hills, from being like in shape perhaps to the usual artificial tumuli, are also termed "houn," or "howe;" for example, Shunner Howe, or Shunner Hill, which is distant about three miles to the south-east of the village of Danby. So Greenhowe is the "green hill," and Howe-hill means "barrow hill," or "artificial mound hill;" it is near the village of Seamer. Many other barrow hills, or tumulus-like hills, occur in that portion of Yorkshire, and they bear such names as

Stanghowe, Glasshowe, Brownhowe, Blakhowe, Threehowes, Arnhowe, Leafhowe, etc.

As some of the larger tumuli, or "howes," possess several sepulchral rooms or chambers, they may probably, after being opened, have afforded from time to time residences to some of the poorer class, and have thus strengthened the corrupted change of appellation from "houe" to "house." Again, as to the specific term of "Picts' Houses," I conclude the word Pict is merely used to denote primitive or ancient, *i.e.*, ancient houses or "houes" of some early people, whether Celts, British, Picts, or Romans, or Scandinavians. In this sense the "Picts' Houses" in the Orkneys are evidently intended. See Gibson's "Camden's Britannia," vol. ii., p. 1468; and under the name of Peights-hillocks and Pight-houses, see same work, pp. 1480, 1481. Likewise in Cumberland are some caverns termed "Picts' Holes," which may possibly have been used as dwellings—

"Domus antra fuerunt;"

but some Latin inscriptions taken from them prove that these holes were of Roman construction. Vide *ibid.* p. 1004. And in the same sense the well-known Roman wall between Newcastle and Carlisle is often called Picts' Wall. Compare Gibson's "Camden," vol. ii., p. 1051, etc.

I am, etc. J. H.

[1863, Part I., pp. 357, 358.]

In "Landnamabók" (Pt. i., c. v.), I find that Leif, the foster-brother of Ingolf, the first Norwegian settler in Iceland, in the course of a plundering expedition to Ireland "found there a great underground house," which, although pitmunk, yet permitted the gleam of a naked sword to be visible. The narrative relates how the Northman slew the Irisher, and, besides much goods, took also the sword and an addition to his name from the circumstance; being thenceforward called "Hiórleif," *i.e.*, "Leif of the Sword."

Again, in Pt. ii., c. xix., there is the fact recorded that Liótólf and Thorstein, bent on taking blood-vengeance on Biorn, beset him "in an underground house," and being helped by Eilif (who had the luck to find a second entrance to Biorn's retreat, and came upon him from behind), slew him there.

The word used in both these passages is *jardhus*, "a house in the earth :" the thing is mentioned in the most matter-of-fact sort of way, without a syllable of comment, because (of course) everybody knew what a *jardhus* was.

Again : about every ten pages or so in this old record I find mention made of the death and burial of some Scandinavian worthy. In nine cases out of ten it is said (though occasionally with the addition that his pet ship supplied him with a roomy kind of coffin), "oc er hann heygdr," which simply is "and he was *houed*."

There are also two or three other terms used in connection with the notice of a burial, e.g., *disiadr*,* *yufa*, *graflnn*. But all these, except the last, imply or express the *heaping up* of the grave-tumulus, or *houe*.

From the collation of which statements and terms I infer that in the minds of the ancient Northmen written of and for, the word *jardhus* carried no idea of sepulture connected with it, but the exact contrary; the structures so termed were, both in Ireland and Iceland, well known and used as places of habitation, or refuge, or storage of valuables—probably all three combined.

The communication in your last number (p. 217), signed J. H., brought the two passages above referred to to my recollection; and it certainly occurred to me as much more likely that the word “houses” in Picts’ houses should have descended (and especially in a one-time Scandinavian district) from the Scandinavian *hus*, than have been corrupted from the modern representative of the Scandinavian *haugr*.†

Shunner Houe is a *houe* properly so called; that is, a sepulchral or grave-hill. It lies very nearly six miles (not three, as stated by J. H.), “as the crow flies,” from Danby End, a little to the southward of east. The true instance of the application of the term *houe* to a natural hill in this Cleveland district, is in the case of a hill which lies close to Castleton on the south-east, and is 852 feet high, with a longer diameter of nearly half a mile. This hill is called “The Houe,” *par excellence*. I do not recollect any other like application of the term in the district.

I know Stanghow, Brownhoue (more than one of the name), Blakyhoue, the Three Houes (in several instances; they are often placed in groups of three), Arnhoue, Leafhoue, though not Glasshoue; and many others with the same peculiarity that characterizes most of these, namely, that notwithstanding the fact that, without a single exception as far as inquiry has been prosecuted, they are of remote Celtic origin, still the prefix, as well as the word *houe*, is Scandinavian, and in no small proportion of instances due to a man’s name: for instance, Arn, Leif. In Glasshoue the prefix would seem to be the same as in Glaisdale, anciently written Glasdale. Stanghow (the name of a township in Skelton parish) is, I believe, Esteintona in

* *Disiadr* implies that the tumulus was heaped or piled in regular order; for instance, in layers or (as spoken of mason-work) courses. Compare the account and section of the *houe* given in the January number, p. 24. *Heygdr* simply implies that a grave-hill was made over the body. We still use the terms *dess*, *dessed* (as well as *houe*), in the specified sense, in Cleveland.

† *Haugr* is the Old Norse word, which is thus interpreted by Haldorsen: “*Collis, tumulus mortuorum.*” The cognate verb is *hauga*, *coacervare*. The equivalent modern Danish word is *hoi*; and, in the districts of Britain most effectually colonised by the Danes and Northmen, the surviving representative of *haugr* is “houe,” or “howe.” I do not find *houhr*, nor do I think it can be really Scandinavian.

Domesday ; and, any way, there is difficulty in determining the meaning of *stang* in connection with *houe*: except it be surmised that, as had been the case with the large tumulus referred to in a previous note, a *stang*,* or pole, had been for some purpose erected on its summit. In the case instanced, the butt of an oak sapling of 7 or 8 inches in diameter was found sunk into the centre of the hill, and it seems impossible to surmise with what intention.

I am, etc. J. C. ATKINSON.

CAIRN IN THE ISLE OF SKYE.

[1841, Part I., pp. 33-37.]

In the autumn of 1839, during a short tour in the north of Scotland, which I had the advantage of making in company with a dear friend, himself a Scotchman, I visited the Isle of Skye. My stay in that interesting island extended only to two days and a half, during which it rained incessantly (in fact it *always* rains in Skye); but some of the observations which I collected during that brief interval, being of an antiquarian character, will perhaps prove acceptable to your antiquarian readers.

My principal object in addressing you is to offer a short description of a sepulchral chamber in a cairn, situated near Broadford, in the Isle of Skye; and, in order to make my narrative more intelligible, I beg to refer you to the annexed representation, copied from a sketch made on the spot by myself.

Before proceeding to describe, I should perhaps premise that Broadford—though a post-town, and possessing, as such, considerable local importance—is an inconsiderable place, situated on the north coast of the southern part of Skye, commanding a glorious view of the opposite mountains in Ross-shire. The neighbouring district belongs to a gentleman named Macinnon, better known by the appellation of his estate, “Coirrie chatachan,” for mentioning whom it will be a sufficient excuse to state that the cairn in question stands on a part of his property; as well as that my companion and myself were indebted to his kindness for pointing out to us this singular monument of antiquity.

Mr. Macinnon’s house may be said to stand on the sea-shore—a small garden in front occupying the only intervening space; about half a mile eastward of which stands Broadford Inn, and nearly midway, in a field of which the beach forms the northern boundary, is situated the cairn, which is circular, and measures 125 paces round the base. It is reported to have been of a conical shape within the memory of persons living; but that the stones which formed the apex have been carried away by the poor people to assist them in building their cottages. However this may be, the cairn is conical no longer,

* *Slaung*, Old Norse, a pole or stake.

but flat at top ; and, except here and there, where a few of the stones of which it was originally constructed are visible, it is covered with grass.

To a person standing on the summit of this mound, it seems clear, after an attentive survey, that it must contain several sepulchral chambers. The surface, which swells slightly at regular intervals, seems to afford unequivocal indications of about ten such subterranean structures, circularly disposed, and of a larger one in the centre ; and this supposition is confirmed in the strongest manner by the discovery, which accidentally took place some years ago, of a chamber beneath one of the protuberances just alluded to. The discovery was made by a poor girl, who related the circumstance to me as follows :—One day, when she was sitting on the cairn, some of the earth near her suddenly gave way, and fell in ; presently, a large stone followed, revealing, to her great surprise and alarm, a dark hole, and showing that the cairn whereon she had been sitting was hollow. She ran and communicated her discovery to some men, who first threw some stones into the cavern, and then descended. The account of such very incompetent observers is hardly to be trusted ; but I was assured that the tomb contained nothing but a coffin formed by a series of rough flag-stones, disposed so as to form a receptacle for the human body ; part of a skeleton, and (I believe) an amber bead, together with some other little object which she could not describe.

The triangular aperture which you will recognise in the drawing (to render which more easily distinguishable, Mr. Macinnon was represented peeping in), indicates the size and position of the stone which became dislodged on the occasion of the original discovery. Having descended through that aperture, the annexed sketch gives you a faithful representation of the curious internal structure which immediately presents itself. The chamber is hexagonal, and was evidently formed in the first instance by six huge stones, or rather masses of rock circularly disposed ; the spaces between them being filled up by smaller flat stones piled horizontally one upon another. The base of the sepulchral chamber measures four or five paces across ; but this space is made progressively to diminish above, by three or four layers of huge stones, each superior layer projecting beyond that on which it reposes, till a circular aperture is formed, measuring 7 feet in diameter. Over this, which may be called the mouth of the tomb, a large flat stone is laid. A section of the structure is represented in the figure (*a*). An immense number of stones, evidently collected on the sea-shore, from the marine incrustations yet discernible upon them, piled round and above, constituted the cairn.

It will be naturally asked how anyone could survey so singular a monument without wishing to extend the discovery by an excavation.

Being prevented by unfavourable circumstances of wind and weather from visiting with my kind friends the wonders of Corrie Usk and Glen Sligachan—a loss which it is impossible to recollect without the most lively regret—the cairn was resorted to as a kind of *pis aller*, and on its stubborn sides was expended some of the fervour which the anticipation of a visit to Corrie Usk had kindled. An understanding was speedily entered into with nine active lads, who, with a “pick-axe and a spade, a spade,” attacked the stony heap at three different points, under the auspices of divers grave old Gaels; who, folding their plaids about them, sat smoking their wee pipes, and predicting between every whiff that *the Saxon* would not find anything. A troop of half-clad children, attracted by the novelty of the undertaking, swarmed to the spot, and contributed to make a very picturesque scene; for I must request you to imagine the sea on one side, beautifully calm, and bounded by a fine range of hills, spiritualized by distance, their hues varying beneath every cloud and every sunbeam. On the other side, swelling up in solitary grandeur, rose a huge hill, around which a veil of mist was perpetually floating, now half-way up its side, now wreathed about its base, and now obscuring it entirely; but more frequently resting on the summit alone, and shrouding from view the spot where, according to tradition, the Queen of Haco, King of Norway, is buried. She desired that her body might be deposited there (so runs the story) in order that the winds of her native land might sometimes blow over her grave; and the hill is called in consequence “Beinn na caillich,” or “the old woman’s hill.” But some people say that the auld wife was King Haco’s nurse, and not his queen. This is a point, however, which, I suspect, we must leave the old ladies to settle between them. The original name is said to have been Duisgir, of which the meaning is not known.

To return to our own proceedings. Our first attempt was made at what appeared a sufficient distance from the chamber already opened, in order to effect an entrance, if possible, into the adjoining chamber: almost simultaneously, an attack was commenced on another well-pronounced protuberance, a few yards further on; and a deer-keeper, who stood by with his gun, having volunteered to show a royal road into the cairn, a third breach was commenced at his suggestion on the side nearest the sea. He declared that he had been present at the excavation of many similar cairns in Caithness, and promised success, if I would only attend to his recommendation.

Long and patiently did we persevere, and more and more certain did we feel as every fresh stone was lifted out and rolled down the side of the cairn, that we were approaching the mouth of a second subterranean chamber; but no symptoms of so glorious a consummation did we discover. The afternoon wore away: hope deferred made the heart rather sick; and the mist, which had been playfully

threatening us for the first hour or two, speedily began to dissolve in rain—a systematic drenching rain, which at first dispersed the spectators, and ended by dispiriting my men. Some whisky, judiciously administered, kept up their spirits till eight o'clock, at which hour they fairly *struck*, disappointed and wet to the skin; but a promise was exacted from them at parting, that they would be on the ground by four o'clock on the following morning.

On the morrow it was very tantalizing, Mr. Urban, to know that I should be obliged to leave the island at nine o'clock, and to see none of the rogues make their appearance till six. To work, however, at six we went. Down came the rain, of course (for it *always* rains in Skye), and in spite of fair words and whisky, at the end of two hours the labourers, one and all, vowed that it was impossible to go on digging any longer, and threw down their spades accordingly. Meanwhile, the revenue-cutter which was to conduct our party to Balmacarra in Ross-shire was waiting to waft us from Skye; so that remonstrance with my pioneers would have been useless. Away we went—I most reluctantly—from my cairn; which the charming society we met with on board the *Swift* (commanded by Captain Beatson) could scarcely teach me to forget. But to return,

It is a very surprising thing that I failed in finding one or more of the sepulchral chambers which I was in search of. All the three points against which the excavation had been directed resembled *externally* that portion of the cairn which had accidentally been found to contain a sepulchre chamber; and in all these three instances did we dig from 2 to 3 feet *below the level* of the mouth of the said chamber. I may also mention that before they abandoned the task, the workmen had made such progress, that what at first were two holes, had become one large one, by their two excavations meeting.

Before concluding, I wish to offer a few remarks on the probable history of the cairn I have been describing; and must beg your patience and attention for a few minutes more, while I advert as briefly as I am able to a delightful and highly poetical peculiarity which struck me much in the north, and at Skye particularly. I allude to the local nomenclature of every meadow, rock, and hill, which prevails so universally.

An intelligent young clergyman, by name William Taylor, was obliging enough to furnish me with the names of the different localities immediately adjoining the cairn, together with their significations; which are as follows. The local name of the field in which the cairn stands is “Fiasag,” which means (“the field of) beards.”

Supposing you to stand with your face to the sea, the field behind is called “Pairc dhubbh,” which means “black park or field,” and the field behind that, “Goirtean a’ bhùlair,” which means “the field of the battle.” Beyond is a locality known as “Guala fà’n dubhai,” which means “the shoulder of lamentation.” The first field on the left is

called "Achadh nan cùrn," which means "the field of the cairns;" behind which is another "black park or field." Next in order comes "Pairc bheag," which means "little park;" and a narrow slip of ground separating this from the beach is called "Port an teampuill," which means the "port of the temple." Next comes Cùl an t-sabhaill, which means "behind the barn;" in the rear of which stands "Creag an eas," which means "the rock of the waterfall," apparently a very inappropriate name; and further back still "Glaic bhuidhe," or the "yellow hollow." The residence of Mr. Macinnon, which comes next, is improperly called "Coirrie," that name being the appellation still retained by a locality about three miles off, where stands the farm anciently inhabited by the family. "Coirrie" is an abbreviation, the entire name being "Coirrie ehatachan," that is, "the corrie or hollow," literally cauldron, "of wild cats." The present residence is sometimes called "Laoras," of which the meaning is not known. I could conduct you further, but had better avail myself of your patience, to lay down the geography of the ground on the *right* hand of a person standing on the cairn.

A stream which divides "Fiasag" from Broadford is called, near its mouth, "Alltan na bracha," which means the "streamlet of malt," because it was formerly used in distilling; higher up it is called the "streamlet of seals." A road running parallel with the beach separates "Goirtean na traghad," the "field of the shore," from "Goirtean na h-uamha," the "field of the cave," to which I shall return by and by. The meadows behind these are severally called the "height of Broadford," the "short hill," and the "field of colt's foot." Next in order comes "Bearbhai," of which the meaning is unknown; but a cairn stood here which was lately removed, inside which, among other objects, was found a curious ornament of green stone, pierced with four holes. Further on is "Achadh a' chùirn," which means the "field of the cairn."

The extremity of this part of the coast is called "Dùn-àcuinn," which means the "castle of Haco," by whom tradition declares the castle to have been built. It is separated from the mainland by "Caol-àcuinn," which means the "straits of Haco;" that monarch, as it is said, having passed through them when he went on his great expedition.

I propose to say a few words more concerning the "field of the cave," so called nobody knew why, till an accident revealed the propriety of the appellation. Mr. Macinnon informed me that a few years ago a labourer of his, ploughing in that field, turned up a large stone, which produced a hollow, into which the man fell. This led to some investigation, when a subterranean passage was discovered, extending to about 100 feet towards the sea, and spacious enough to admit a person on all-fours. It terminated in a circular chamber, which might have contained four persons crowded close together;

and here some sheep-bones, a few cinders, and a quern (or stone for grinding corn) were found, obviously showing that it had been a place for retreat and concealment in some remote age.

So much for matters of fact. The traditions of the islanders remain to be noticed ; and these, vague as they undoubtedly are, are as unquestionably founded in truth. A battle, say they, was fought on the "field of the battle," between the Scandinavians (Lochlannaich) and the Gaels ; and during the engagement, the women stood on the shoulder of a neighbouring hill, watching the progress of the engagement ; which being disastrous, they wrung their hands, crying "*Fà mo dhubhai, fà mo dhubhai,*" "My cause of mourning, my cause of mourning," or, as we should say, "Alas ! alas !" From which circumstance the place is called "the shoulder of the cause of mourning (or of lamentation)" to this day. "Narrations like this," as Dr. Johnson justly observes on another occasion, "how ever uncertain, deserve the notice of a traveller, because they are the only records of a nation which has no historians." That the event was memorable, and, to the last degree, important to the natives themselves, everything conspires to prove ; the nomenclature of the neighbourhood,—six large cairns, of which I believe but two remain, and the numerous stone coffins (composed, each, of four flat stones) which were discovered in the "field of cairns," twenty or thirty years ago. Lastly, a nursery rhyme may be cited, which no one can explain, though every child in the island repeats it. It is a mere string of names, the four first being the names of four very small neighbouring islands ; and my intelligent informer declared it to be his opinion that it was a traditional list of the most remarkable places connected with the calamitous events which had once befallen the island. The words are these ("is" or "'s" means *and*) :

"Giullamain 's Longai,
Is Cròlain 's Pabai,
Achadh a' chuinn 's Achadh nan carn,
Goirtean a' bhùlair 's Fà'n Dubhai."

The poor people do not seem to be aware that a cairn was a place of interment ; on the contrary, one Hugh Ross, famous for his skill in reciting Ossian's poems, assured me very gravely that the cairn in *Fiasag* was a prison, in which nine Norwegians had been incarcerated. It can scarcely be doubted, however, that some of the most honourable of the slain were interred there, after the memorable battle above alluded to ; and surely, in the absence of authentic records, it is something to be able thus to obtain a glimpse even of annals so remote —remote, geographically as well as historically speaking ; nor is it difficult, when the very stones, as it were, thus speak to one, to fill up the meagre outlines of the tale of *lang syne* which they supply, with deeds of blood, and the shapes of heroes such as Ossian delighted to celebrate.

J. W. B.

CAITHNESS.

[1866, Part I., pp. 65-68.]

In July last, Dr. Hunt, F.S.A., etc., the President of the Anthropological Society of London, spent some days in Caithness on his way south from Shetland, where he had been conducting an exploring expedition with considerable success. Dr. Hunt's engagements did not permit of his remaining in Caithness for any length of time to investigate its antiquities in person, but a small grant from the Society's funds was entrusted to Messrs. Anderson and Shearer, as a local committee, under whose superintendence the investigations were carried on, and the structure of one class of the ancient remains of Caithness has thus for the first time been ascertained.

The hills around the Loch of Yarrows are singularly interesting, both on account of their natural beauties as well as on account of the number and variety of the ancient remains with which they are studded. The margin of this pretty loch and the neighbouring heights seem in ancient times to have been a favourite settlement of the old inhabitants. Around its shores at intervals are numerous tumuli yet unexplored, the ruins doubtless of the dwellings or the sepulchres of the tribes that frequented its margin. Some of these have long since been quarried away and built into dykes or dwellings for the modern inhabitants. In one of these "cairns," thus removed, some years ago, was found a beautiful fluted cup or vase, of coarse pottery, but of very elegant design, which is still carefully preserved in Pulteneytown by Mr. David Coghill, into whose possession it came when the cairn was removed. A beautiful polished stone hatchet, with a hole bored through it for the handle, and which came out of a cairn at the neighbouring Loch of Breckigo, was also preserved by the late Mr. Innes, of Thrumster, and was recently exhibited by Mr. Macleay at the discussion on the Caithness antiquities at the Anthropological Society. The late Mr. Rhind, who explored five or six sepulchral cairns on the summit of the Yarrows Hills, obtained a few relics, chiefly portions of skeletons and fragments of pottery, from them, but neither weapons nor ornaments. The cairns explored by Mr. Rhind were all nearly circular, conical heaps of stone uncovered by soil, and some of them of very considerable magnitude. They were all of one type, and consisted internally of a low-lintelled passage, widening into recesses at either side, and leading into a central chamber, which was divided into compartments by monoliths projecting from the walls. The whole of these structures, whatever may have been their original intention, had been used as sepulchres, and used for three different modes of sepulture. In the passages were found the remains of bodies extended at full length. In the compartments of the chambers, which generally measured no more than 4 feet between the monoliths, were bodies which had been buried in a

crouching position or doubled up with the feet and head together and the thigh-bones in some instances broken. In the corners were urns with incinerated bones. Neither weapons nor ornaments, as we have said, were found in any of these chambered cairns. But the largest conical cairn on the top of the hill, which was opened three years ago by J. G. T. Sinclair, Esq., of Ulbster, was found to be of a different structure internally, consisting of an immensely large cist, with (so far as can be seen) no passage, while the body had been buried in the cist among a quantity of sea-beach, in which the common shore-shells were abundant. A bronze spear-head was found along with the bones.

But there was a rarer class of structures on a hill close by, which there was good reason to believe were also sepulchral. There are but three of them in the county, so far as we are aware—two of these being on the Yarrows Hills, and the third at Campster, beside the largest conical cairn in Caithness.

These three cairns are distinguished from all others by their immense length in proportion to their height, and by their expanding at both ends into crescentic or semicircular projections or horns. The largest of these singular cairns, at Campster, is about 240 feet in length, and those at Yarrows are respectively 215 and 190 feet long. They are highest at the eastern end, but present no structure externally but that of a long mound of stones.

These two long, horned cairns at Yarrows have now been explored, and their internal structure for the first time ascertained. They both contain at the eastern end a series of five chambers disposed after much the same plan as in the circular cairns, being divided into separate compartments by large monoliths let into the walls. In the large cairn the last chamber formed a crypt, or cist, covered with an immense block, about 9 or 10 feet long, and weighing apparently from two to three tons. The stones on which it is supported in front, and which form the sides of the small low doorway into the recess which it covers, are 9 inches thick. A slab closed the entrance to this place, which was filled to the top with stones not much larger than road-metal. Nothing was found in it but a bed of ashes and burnt bones. The same layer of ashes, wood, charcoal, and burnt bones covered the whole floor of the other chambers to the depth of 6 or 8 inches, and the only things found in it were a number of flint chips and some fragments of pottery. The curious horn-like projections were found to be regularly built on both sides, and at the termination of the southern one, at the eastern end of the cairn, there was a large flat slab mounted on another larger slab so as to be about the height of a table, while two large stones set on edge formed a sort of passage at the end and inner side of it.

The exploration of the other (smaller) long cairn disclosed an almost precisely similar general plan, differing, however, in the details

of its structure. The horns in this case were found to contain regular passages leading into the entrance to the cairn. The chambers were the same, but there was no crypt at the back. The most interesting discovery in connection with this cairn, however, was a secondary interment in one of the compartments. The floor was covered with the usual ashes and burnt bones, but in the back part (where the crypt was in the other cairn) was a roughly built enclosure in the body of the cairn open to the chamber, and in it lay some portions of a skeleton. In another corner, close by the monolith, a few human teeth were found ; and between the two monoliths that formed the first compartment on the south side there was a cist, almost square, about 3 feet each way, formed by setting a stone across between the monoliths, and so shutting off a square space from the floor, having the wall of the chamber on one side, the monoliths for the ends, and the stone between them for the outer side. A stone was put in at one end, resting against the monolith, and another at the back, along the wall, and on these and the outer stone two covering-stones rested. When these were removed, the cist was full of a dark-coloured clay, and on its being carefully searched, an urn, finely ornamented with lines of markings, apparently produced by pressing a pointed instrument against the soft clay, was discovered. It was unfortunately in a very friable condition, cracked into small pieces, and so wet that the pieces were scarcely to be distinguished from the clay in which they were embedded. But the most interesting part of the discovery remains. At the other end of the cist some small, round black bodies, not so large as small peas, were noticed, and these being examined, they turned out to be stone beads ! The clay was carefully washed, and upwards of seventy of them picked out. They lay in a row in the clay before it was disturbed, just as they would have done if they had been on a string when put into the grave along with the calcined ashes of the barbarian beauty that wore them. They are very rudely bored, and are apparently formed of the lignite or fossil wood so common in the oolitic formation of Sutherlandshire. Pieces of this lignite may be found in the Caithness boulder-clay, and the story of the ancient tree that was turned into stone, when the seas that rolled over these hill-tops swarmed with ammonites and belemnites, that was countless ages afterwards torn from its rocky bed, and borne across the Ord in a grating ice-raft, and countless ages afterwards found sticking in the clay by a prowling barbarian, and laboriously fashioned into a string of rude beads, for the adornment of a prehistoric beauty, has surely enough of romance in it to interest the most matter-of-fact reader in these matter-of-fact times.—*John o' Groat Journal.*

[1864, *Part II.*, pp. 714, 715.]

Mr. Samuel Laing, M.P. (ex-Finance Minister of India) has recently made some very interesting explorations in Caithness, and has thus described the results in a letter to the *Northern Ensign*:

"Two remarkable mounds exist on the sandy links of Keiss, near the point where the Wester-burn enters the sea, seven miles north of Wick. These mounds are obviously artificial, and are strewed over with remains of shells, broken bones, teeth of animals, and stones and calcined matter, showing the action of fire. Having obtained the kind permission of the proprietor, Major Macleay, I have had some excavations made with the intelligent aid of Mr. Sang, the gardener of Keiss Castle, who has had some previous experience in opening tumuli in the south.

"Six human skeletons have been found, enclosed in rude cists of unhewn stones, having the appearance of great antiquity. One of these was found at the base of the smaller mound in Keiss links; the five others in the large barrow, where from every appearance there must be from fifty to a hundred others.

"The remarkable fact about these skulls is that they show a type of singularly low development, being of small capacity, with narrow receding foreheads and projecting jaws. One skull in particular shows the prognathous type, or sloping outwards of the upper-jaw teeth characteristic of the negro and other inferior races, in a degree which seems scarcely human. Combined with this is a forehead receding at the same angle, and narrower by fully half an inch than the narrowest I can find among a table of thirty-nine skulls of ancient tumuli given by Wilson in his 'Prehistoric Scotland.' As far as I can judge, without the means of very accurate measurement, and with nothing to compare with but the drawings of ancient crania on a reduced scale in Lyell's work on the 'Antiquity of Man,' this Keiss skull in its facial angle and vertical depression approaches closely to the celebrated Neanderthal skull, which has been quoted as the closest approximation of the human skull to that of the quadruped. It is, however, of a different type from that skull, the occipital region, instead of being deficient, being extremely projecting, so that between the extreme lowness and narrowness of the frontal region and the posterior projection, if a vertical line were drawn over the skull from ear to ear, three-fourths or more of the total volume of the brain would be found behind the line.

"The skeletons generally indicated men of short stature, from 5 feet to 5 feet 4 inches in height. They were buried at full length, or nearly so, but without regard to position, lying in some cases on the back, in others on the face, or sideways, and with their heads to different points of the compass. The peculiar type of these crania adds to the interest of the question of their antiquity. Unfortunately no trace can be found of any implement or ornament having been

interred with them. But the shelly mounds, with which they are evidently associated, give evidence of their having belonged to the stone period.

"Excavations have disclosed part of a subterranean dwelling, or place of sacrifice, built like the Picts' houses, with narrow passages and some small chambers, walled, paved, and roofed over, at a great expense of labour, with large unhewn stones, brought from the beach at some distance. In these were numerous shells, charred bones, and burnt matter, and among these débris were found two stone implements, one a smooth oval sandstone block, about 6 inches in diameter, round which a deep groove had been cut, giving it exactly the appearance of a ship's block cut in two. The other was a small round stone, pierced with a hole, of the sort well known to antiquaries as 'whorls.' Another 'whorl' was found of bone, made of the ball of the femur of some animal; also a large pin and a skewer or bodkin made of bone. One or two chalk flints were found, which had some appearance of having been artificially chipped and thrown aside as failures, but no trace of any flint weapon."

"These, however, with the total absence of any mark of tools on the stones or on the graves and buildings, their identity in type with other tumuli and barrows, in which stone and flint weapons have been discovered, and the total want of any trace of pottery or earthenware, which must have mixed largely with the refuse-heaps of any people acquainted with their use, will probably suffice to satisfy us that the mounds, with their accompanying remains, are really of the stone period.

"The limpet and periwinkle have evidently furnished the staple article of food; but mixed with these are numerous fragments of teeth and bones, among which I believe I can identify the ox, the horse, the hog, the sheep, the deer, the roe, and the rabbit; but whether of the domestic or wild species, will require the future determination of some skilful comparative anatomist. There are also bones of birds, several species of fish, large and small, and a few remains of the crab, cockle, and mussel.

"I may add that I have seen a mound of apparently the same character covered with the same shell and teeth on the shore of the little sandy bay immediately to the west of Duncansbay Head, and I doubt not there are many more in the county."

THE KNOWE OF SAVEROUGH.

[1862, Part II., pp. 601-604.]

In compliance with your request, I now forward to you an account of my recent discoveries at the "Knowe of Saverough," in Orkney.

I am, etc. JAMES FARRER.

The Knowe is close to the sea, and only a few feet above high-water mark. It is on the property of the Earl of Zetland, and about

half a mile from the small “town” of Birsay, in the west mainland of Orkney. Small fragments of bone have, it is said, occasionally been observed protruding from the ground, and some years ago an iron or bronze spear-head was picked up by a child on the top of the Knowe. It is stated that the exact counterpart of this weapon was found many years previously sticking in a skull about a mile to the north-west of the Knowe. The body had been interred near the beach, and was only discovered in consequence of part of the land being washed away by the sea. It is not easy to define the original limits of the Knowe, since its shape is liable to alteration from the frequent shifting of the sand. The diameter may perhaps be estimated at 168 feet, and its greatest height at from 14 to 16 feet. The excavations, which were commenced on July 21, 1862, resulted in the discovery of many human skeletons more or less perfect, and at depths below the present surface, varying from 2 to 8 or 10 feet. Those which were nearest to the top of the Knowe were the most decayed; but owing to the shifting of the sand, previously alluded to, it is impossible to say what might have been the depths of the graves when the bodies were interred. Not a vestige of any clothing was discovered. All the bodies had been laid in kists, but in every instance these were broken, owing probably to the weight of superincumbent sand during a long period of time. The sand was only slightly discoloured, but in some instances the decomposed fibrous roots of grasses were found amongst the bones of the skeletons—a circumstance justifying the inference that those kists had been originally constructed on the surface of the ground, and that the sand had afterwards been piled up over them. The heads of all the skeletons faced the north-west, with exception of two, Nos. 8 and 10, which were turned to the north. There were flagstones underneath the bodies only in a few instances. The various skeletons are numbered in this description according to the order in which they were found.

No. 1. The head slightly inclined, and mouth open, the body laid flat, with the arms by its side. The left hand rested on a small flat stone. The vertebrae of the back appeared to be forced up between the ribs, but the body did not appear to have been disturbed since its original interment. Sand and the decayed roots of grasses filled up the interstices between the ribs.

No. 2. This skull (which is now in the Museum of the Society of Antiquaries at Edinburgh) has a circular orifice at the back of the head, as if from a wound by an arrow or some pointed instrument. At the head of the skeleton No. 2, on the right, was a clay-baked urn, filled up with sand. It was 5 inches high, $5\frac{1}{2}$ inches in diameter, 16 inches in circumference at the top, and $3\frac{1}{2}$ inches in diameter at the bottom. It is now with the skull in the Museum at Edinburgh. No. 2 is the skull of a male of about thirty-five years. It is remark-

able for its small size and very short round form, being eminently brachycephalic. The face is short and very broad; the lower jaw large, broad, and angular, and has the peculiarity of a disproportionately small chin. The teeth are flatly eroded, as in No. 8.

No. 3. This skull was above No. 2. No teeth were found. It was less well preserved than No. 2, and the size of the skeleton could not be ascertained.

No. 4 was also much decayed. It was deposited above, and not far from No. 1.

No. 5. Only some fragments of skull and bones.

No. 6. The legs of this skeleton were uppermost, and within 2 feet of the surface; they were doubled up over the ribs. A large stone was laid on the skeleton, the skull of which was broken in removing. It was not far from No. 2. The kist-stones were displaced, and the body appeared to have been hastily interred.

No. 7. Remains of two bodies, both very near the surface. They were much decayed; the bones were intermixed, and these also appeared to have been interred in a very hurried manner. It is possible that much of the sand originally covering these graves has been blown away.

No. 8. This skeleton was laid flat, and was the most perfect of any that were found; the feet only were missing.

No. 9. Only fragments of jaw-bone, a little above No. 7; and it is possible that these fragments may have belonged to that skeleton.*

No. 10. Skull and bones: one end of the cover-stone of the kist had fallen on to the head.

No. 11. The head of this skeleton could not be found, nor any part of the body below the knees.

Dr. Thurnam, the well-known craniologist, to whom I at once forwarded the skulls for examination, has kindly furnished me with the following information:

"The skulls Nos. 1, 8, and 10 are those of males. They are well developed, and more or less of brachycephalic type. The two former are very fine specimens, with almost every tooth, and the large and prominent nasal bones unbroken. No. 1 is of large size. The two, with individual differences, present considerable similarity to the Orcadian skull figured in the '*Crania Britannica*,' pl. 21. Nos. 3, 4, and 7 are doubtless the skulls of females. They are all of the low, narrow, and elongate form, called kumbecephalic by Professor D. Wilson. No. 4 is that of a young woman; No. 7 is of middle age; and No. 3 that of a woman far advanced in life, the lower jaw presenting doubtful traces of the presence of a solitary tooth. Two of the male skulls (Nos. 1 and 10) are those of men of middle age, the other (No. 8) that of a young man of about thirty years. None of the 'wisdom teeth' have been developed in the skull No. 1, and

* Dr. Thurnam is of opinion that these fragments belong to No. 4.

one of these teeth is absent in No. 8. The crowns of the teeth generally are much worn, as if from the use of coarse food; the attrition is flat, and moderate in extent in No. 8, but much more advanced in No. 1, in which the surfaces of the teeth are oblique and jagged, as if from gnawing roots or tearing flesh from bones, as is common in uncivilized hunting tribes. There can be no hesitation in referring these series of skulls to the ancient Celtic inhabitants of Orkney, and as little doubt that they belong to a period prior to the Scandinavian settlements in those islands."

The further excavation of the Knowe revealed a small kist containing the leg-bones and some of the ribs of a child: this kist was at least twelve feet from any of those previously discovered. At this point, the existence of a large building at some remote period became apparent. Many of the stones were water-worn, and had evidently been taken from the sea-shore; others, again, had been quarried: the thickness of the walls could not be ascertained owing to the ruined state of the Brough, but the discovery of an ancient "comb," a deer's-horn handle of some instrument retaining yet the marks of iron tacks or nails, some bones of a whale, querns, bone pins, etc., justifies the conclusion that this part of the Knowe of Saverough must have been at some time the site of a Brough. A few feet further in, two small kists were found one above the other, but the upper one was too much broken to admit of its dimensions being taken. It was nearly filled with sand, and contained a few small pieces of bone. The lower kist was more perfect, but very few bones remained. Its dimensions were 3 ft. 10 in. in length, 1 ft. 9 in. in width, and 1 ft. 8 in. deep; it was 7 ft. below the surface of the ground, measuring from the top of the kist. Close to these kists, and protected by large stones placed in the form of a kist, was a large bell composed of iron, coated with bronze, riveted on one side: the loop for the hammer or clapper still remains. It rested on the handle, and the mouth was covered with a flat stone. The length, including the handle, is 14 $\frac{1}{2}$ in., about 27 in. in circumference at the top, and 7 by 9 in. across the mouth. It is supposed to belong to the earliest Christian times. Professor Wilson, in his "Pre-Historic Annals of Scotland," p. 660, gives a drawing of one precisely similar in character, which he supposes to belong to the fourth century, when St. Ninian, the first Catholic Bishop in Orkney, was sent by Siricius, Pope of Rome, to preach the Gospel to the heathen tribes of North Britain. The bell, which is much corroded, had evidently been deposited many centuries ago. The stones forming the sides of the kist were almost rotten with age, and a portion of one of them adheres firmly to one side of the bell. I do not, of course, venture to assign any fixed period for the construction of the Brough in which these relics of antiquity have been found; it seems not improbable that it may have been used as a place of burial by some of the tribes inhabiting

the islands, long after it became a ruin. The fact that iron was not entirely unknown to the ancient inhabitants of the Brough forbids the assumption that they lived in the very early part of the stone period, though it may not be unreasonable to conclude that the use of metallic tools was very little known to them. The destruction or desertion therefore of the Brough probably occurred towards the close of the stone and the commencement of the iron period. The bell, of course, belongs to more recent times, and can have had no connection with the heathen race who inhabited the islands previous to the Christian era, and of whose interment in the Knowe of Saverough the depositors of this ecclesiastical relic were doubtless entirely ignorant, since it is hardly to be supposed that an object of such veneration would be concealed in a Pagan burial-place. The practice in early Christian times of interring bodies with the face to the east is conclusive against the idea that these people were converts to Christianity. None of the bodies occupied the position justifying such a supposition. I think, then, the following conclusions may not unfairly be arrived at :—That at a remote period a large Brough, or inhabited building, occupied part of the hill now known as the Knowe of Saverough ; that long after its destruction it was used as a place of interment by the Celtic inhabitants of Orkney ; that there is no evidence of the time at which the interments took place, beyond the fact that it must have been before the Christian era ; and that the ruined Brough was selected as a place of concealment for the bell during perhaps times of persecution, with a view to its removal at the proper time to a place of greater security.

BURRAY, ORKNEY.

[1863, Part I., p. 432.]

The *Orkney Herald* relates a recent discovery which in some points is of extreme interest, if the facts are correctly stated. We reprint it, with the view of obtaining information on the subject : "A correspondent in Burray has forwarded us particulars regarding the opening up of a tumulus in Burray, and the discovery of a large number of human skeletons. It appears that labourers had been employed in trenching a piece of ground on the North Field farm, of which Mr. Andrew Kennedy is the present tenant. After digging over a few yards the labourers laid bare a strong-built stone wall, and, continuing their operations, they found it was of circular formation. They stumbled upon a doorway similar to that of the Maeshowe tumulus, which led to the inside of the building through a narrow passage. At the termination of this passage they came upon a small compartment, about $4\frac{1}{2}$ feet square, which contained ten human skeletons, and the skulls of some three or four dogs. Continuing their explorations, the labourers found in all seven compartments of small dimensions, each separated from the other by a large flagstone

standing on end, and each containing the skeletons of human beings and dogs. There were also a number of fish-bones of a very small size. The bones of the human skeletons were extremely large. One skull measured $\frac{3}{8}$ inch in thickness, and another $\frac{1}{4}$ inch. The features appeared to have been of the Esquimaux type, short and broad. The remains must have been huddled together when entombed, as none of the compartments in the catacomb were above $4\frac{1}{2}$ feet in length. Twenty-seven skulls in all were counted, and, considering the centuries that have elapsed since they were laid in that lonely sepulchre by the sea, they were all in a remarkably fine state of preservation."

NORRIES LAW.

[1864, *Part II.*, p. 404.]

The tumulus on Norries Law, on the estate of Largo, has been an object of especial interest to archæologists since the discovery of some curious silver reliques there more than forty years ago. A desire having been expressed for permission to ascertain the plan of construction of the mound, and to make a thorough investigation of it, the proprietrix, Mrs. Dundas Durham, not only granted her consent, but executed the excavations by her own workmen, under the eye of Mr. Howie, of Largo, who has been employed in similar researches at St. Andrews and elsewhere. The digging took place on August 16, when, besides a party from Largo House, there were present Admiral Bethune of Balfour, Mr. Cosmo Innes, Mr. Joseph Robertson, and Mr. John Stuart. From the excavations, it appeared that a circular foundation of stones had been placed at the outside, with appearances of a lesser one within. A cairn seemed to have been raised on the latter, many of the stones of which bore marks of fire. A small triangular cist, containing incinerated human bones, was found in the foundations of the external wall, and at a spot outside of this an urn appeared, surrounded by bits of calcined wood. The whole structure seemed to have been surrounded by a ditch and earthen rampart. The silver reliques were discovered in a sandhill on the west side of Norries Law. They are in every way of great interest and importance, as on some of them the mysterious symbols peculiar to the sculptured stones of Scotland are engraved, thus affording a connecting link between two different classes of our early remains. With the view of making these reliques more accessible and available, Mrs. Durham has handsomely presented them to the National Museum of Antiquities.

—*Sotsman.*

DISCOVERY OF ANCIENT GRAVES AT ALVAH, BANFFSHIRE.

[1862, *Part I.*, p. 420.]

A considerable number of ancient graves has recently been discovered in the parish of Alvah, a place abounding in antiquities. The ground is a stubble field, on the farm of Auchenbadie, occupied

by Mr. Duncan, and lies on the hillside, close to the river Deveron. The spot has till now been considered a stony knoll on the upper end of the field, with scarcely as much mould on it as forms a fur for the plough ; and to the plough we are indebted for the present discovery.

The field was being ploughed, when at the place referred to the implement was much obstructed by stones. On beginning to clear these away, the men were surprised to find that the stones were quite loose and easily raised. They were all carefully laid on their flattest and broadest sides, layer above layer, and between the nethermost layers was a quantity of wood-ashes and calcined bones. The stones were unsculptured, and no urns or implements of any kind were found.

The space occupied by these graves measures about 85 paces in circumference ; it is oblong in shape, stretching north-east and south-west. The stones are of but small dimensions, few of them measuring more than $2\frac{1}{2}$ feet long by about 1 foot broad, while some of them are scarcely 1 foot in length by 9 inches broad. They are chiefly slaty, and of greenish and greyish colour. Many of them bear the marks of fire, and the ashes and calcined bones adhere to them. The mould found among them was of various colours, and differed greatly from that on the surrounding surface of the field. There were no calcined bones under some of the stones ; but where this was the case, there was mould of considerable depth under them. In some places the graves were a few feet apart from each other, and some of them were covered with, or had a greater number of stones belonging to them than others. In one place, where the graves were a few feet apart, there was a layer of moss below a layer of yellow clay, and above a layer of white marl, which rested on a yellowish sand bottom. About thirty or forty cart-loads of stones have been disinterred ; but twice that number are supposed to be yet underground, and it is not likely that many more will be removed at this time. The rudeness of the stones, and the absence of urns, would indicate the graves to be of very ancient date.

About twelve years ago a circle of broad stones, standing on their edges, and having an opening to the east, was discovered in the adjacent field, and at the distance of about 200 yards from the site of the present discovery. This circle was nearly 4 feet in diameter, was causewayed with small, smooth, rounded stones, and contained some ashes and calcined bones.

On the same farm on which the present discovery has been made, there is a large crescent-shaped artificial mound, nearly 50 feet high, called the Ha' Hill—a name which would indicate that it had once been crowned with a castle. Some years ago Mr. Morison, the proprietor, had a deep trench cut through this mound, but no discoveries were made. Subsequently, however, Mr. Duncan, whilst

removing earth from it, came upon some small millstones (querns rather), and also dug up ashes and calcined bones at a depth of 5 to 6 feet from the surface.—*Banffshire Journal*.

ANCIENT URNS DISCOVERED.

[1816, Part II., p. 300.]

A very curious discovery has lately been made in one of the Northern Islands of Zetland called Uyea (lying near the Island of Unst). The following extract of a letter just received from a friend on the spot, conveys all the information which I yet possess on the subject :

" For some time past the proprietor of Uyea, Mr. Thomas Leisk, has had men employed in erecting a dyke in the island ; who, in quarrying stones on the top of a small conical hill called the Wart, found a great quantity of loose stones collected together in a heap ; upon removing the uppermost of them, a mound of earth intermixed with small stones appeared, which the men began to dig up, when, to their great surprise, they discovered a great number of stone urns, containing the ashes of the dead. They were arranged in regular order, surrounded with large stones to separate them from each other, and of different shapes and sizes ; some round, others oval, none larger than a common basin. I had the curiosity to go to the place, and took out one myself, and examined its contents. In the bottom, the small pieces of unconsumed bones were carefully laid ; next to them the human dust ; above it, a covering of clay, and over all a large stone. If you esteem it a curiosity, I have kept one for you."

I have written to request a full and exact account of the circumstance, accompanied with one of the urns, which, when I receive it, shall be cheerfully communicated to you ; with some observations on the remains of antiquity still extant in the Zetland Islands, and several circumstances connected therewith.

A NORTHERN ISLANDER.

ABERDEENSHIRE.

[1862, Part I., p. 256.]

In one of the high-lying fields on the farm of Burreldales, Fyvie, Aberdeenshire, possessed by Mr. Adam Nichol, is one of those large stones which are usually understood to mark places of worship or sepulture in the early ages of our country's history. This stone has evidently been conveyed from the rocks in the vicinity of Mr. Nichol's farm-steading, and, in every sense of the word, [its movers] must have had "uphill" work ere they conveyed a stone upwards of two tons weight a distance of half a mile. For several yards around the stone, the soil has hitherto remained in its natural state ; but, lying as it does in the heart of a cultivated field, Mr. Nichol recently resolved to raise the stone on edge, and trench the hillock around.

During this process, an immense number of small stones have been turned up, which no doubt formed the outer and inner circle—as, indeed, these could be distinctly traced, although there had been little skill in masonry displayed when formed. A neatly built grave was disclosed by the removal of a large flag-stone. Underneath was a smaller stone, fitting in to the mouth of the grave, and concealing an urn containing a quantity of bones. Then came another stone, on removing which there was found another urn with bones. Both urns were more or less broken. A few yards from the above, another grave, containing an urn and some bones, was also found, and in this grave there was a knife-shaped piece of bronze. A little way off was found a large deposit of black material, with layer upon layer of bones intermixed, to a depth of several feet. Indeed, judging from the large amount of remains, the whole place around the stone seems to have been a burial-place of note. The old highway to Aberdeen, or “King’s Road,” passes through between the two eminences described.—*Banffshire Journal.*

BEITH.

[1864, Part II., p. 157.]

About forty years ago there was a cairn of stones at the foot of the Cuff Hill, on the estate of Hessil Head, in the parish of Beith. At that time the late Dr. Patrick, who had just bought that estate, ordered the removal of the cairn; but after a few cart-loads had been removed, two tombs of a very coarse structure were discovered. Dr. Patrick then stopped the removal, and had the cairn enclosed and planted. Nothing more was done to it until recently, when some men were removing a few of the stones for the purpose of making caves for the protection of foxes. They came upon a tomb larger, and of a finer structure than the former. This tomb is built of limestone slabs, of the same stone as wrought at present at Overton quarry. The slabs, one on each side, measure 8 feet 5 inches in length, by 3 feet 5 inches in breadth, and there appears to have been an attempt to polish one of them. The tomb lies due north-east by east, and measures 8 feet 5 inches in length, 3 feet 5 inches in depth, 2 feet 5 inches wide at the north-east end, and 3 feet 9 inches at south-west end. All the tombs lie in the same direction, in a line with the rising sun, at the summer solstice. When the tomb was opened a number of bones were found, which proved to be the humerus and ulna of the right arm, the femur, fibula, and tibia of the right leg, and a jaw-bone—all human remains. There were two fibulae of the right leg, proving that two bodies at least were interred in the tomb. From the size of the bones, they are supposed to have belonged to stout-made men, of about 5 feet 8 inches in height; and from the structure and position of the tomb, being in the centre of the tumulus, the conclusion is evident that the individuals were chiefs. The tumulus is about 60 yards in circumference and 10 feet

high, and is composed of loose stones thrown upon the top of the tombs.

DUNOLLY, ARGYLESHERE.

[1828, *Part I.*, p. 65.]

There has been lately discovered at Dunolly, in Argyleshire, the seat of Captain M'Dougall, R.N., an ancient Highland cemetery, immediately under the rock upon which the ruins of the castle stand. In the centre of this charnel-house was a large flag-stone, covering an opening not unlike a modern grave; but nothing was found in it to disclose the purpose for which it had been reserved. Among the ashes in the cave were the bones of various animals, pieces of iron, remains of broadswords, a few defaced coins, and other vestiges of the cunning hand of man. There is no existing tradition of the cave, or of the use to which it had been dedicated.

CABRACH, BANFFSHIRE.

[1862, *Part II.*, p. 405.]

About the end of August last, while a labourer was digging sand in a clover-field on the farm at Forteath, Cabrach, he came upon a stone coffin. This field, which is situated upon the north side of the river Deveron, would appear to have been in early days a graveyard, for, during the past forty years, ten or twelve graves have been opened in various parts. The greater part of these graves have been found by the plough laying bare the top of the cists; but it is now seen that numbers of graves have been dug very deep, so that the plough will not reach them, the top of the cists being from 2 to 3 feet below the surface. The last two found were accidentally laid open in digging for sand, and were only a few feet apart from each other. In the present instance the stone coffin is a parallelogram, measuring 3 feet 11 inches by 2 feet 4 inches. The sides and ends are formed of flags from 4 to 5 inches thick, of green stone, taken from the summit of the Keilmen's Hill, distant about three-quarters of a mile. The lid, or covering, measures 4 feet 10 inches by 3 feet 6 inches, and is from 8 to 9 inches thick. The lid is a species of basalt, from a rock that overhangs the river upon the opposite side, distant about 300 yards, with a dip of upwards of 80 feet. The coffin lies almost due east and west. In general, the graves found at Cabrach have had the bottoms smoothly causewayed with round pebbles from the river; but in this one the bottom is laid with a flag. The body had been laid in the cist with the head towards the east, resting upon a flag-stone for a pillow, about 5 inches in diameter, with an elevation towards the north, and the body was compressed into the grave in a stooping position. An urn, which was found placed upon the breast, when exposed to the air, went to fragments. The only thing observed within it was a piece of flint; it was not an arrow-head, nor any part of a warlike instrument. There was a considerable quantity of char-

coal found in the grave, also below the flag at the bottom. The body was all decomposed, except a part of the skull and the leg and thigh-bones, which were in tolerable preservation. — *Banffshire Journal.*

BERWICK.

[1831, Part I., p. 163.]

A plough in a field on the Blackadder estate, Berwickshire, came in contact with a large stone, which, on being displaced, proved to be the lid or covering of a well-constructed stone coffin, containing a quantity of earth and human bones. On removing the contents with a spade, the fragments of an urn were turned up, and a flint arrow-head. This inartificial tomb probably contained the relics of a chief of the Ottadini.

DOLPHINTON, LANARKSHIRE.

[1819, Part II., p. 252.]

Among the many relics of antiquity with which Scotland abounds, one has lately been discovered at Newholm, in the parish of Dolphinton, Lanarkshire. At the head of the avenue which leads to the house, upon a cut being made through a little eminence, there was observed a regular row of stones; and, on removing the earth, there appeared a most entire and well-formed stone coffin. Contrary to the general mode of construction, it was narrow, and made in exact conformity to the shape of the body. The stones were closely and regularly set around. The upper edge was as smoothly level as if it had been hewn. The bottom was laid with stones, and they who had paid the last tribute to the mortal remains had kindly placed a stone for a pillow. Notwithstanding the lapse of ages since the body must have been deposited in its dreary abode, the bones were found very entire. The skull was almost whole, and to the eye seemed uncommonly large between the occiput and sinciput. Most of the teeth were sound. The arms, bones, back, thighs, and legs, were all recognised. The inside of the coffin was fully 6 feet long, and it appeared as if the body had been pressed into it. These sad relics were examined with reverence, and again deposited in the place which they had occupied for so many centuries.

BRIGGS.

[1864, Part II., p. 18.]

The "Cat Stane," situate on the farm of Briggs, within a stone's throw of the river Almond, and between six and seven miles from Edinburgh, on the Edinburgh and Glasgow road, which has long been a subject of interest and of puzzle to the antiquary, is a natural boulder, irregularly triangular in shape, about 12 feet in circumference, and rising about 4 feet above the ground, which at this point is slightly elevated, partaking somewhat of the character of a mound.

Of late years several attempts have been made with a view to discover if there were in the vicinage of the "Cat Stane" relics of any description, but these were quite bootless. Recently, however, Mr. Hutchison, of Carlowrie, after vainly trying to the west of the stone, went a little to the east of it, where none had ever thought of excavating before, and here, within 2 feet or so of the surface, he was fortunate enough to light upon a stone kist. In a very short time his men came upon others, and there are now lying exposed to view thirty or forty, and probably many more will yet be found. These kists are of the rudest description, being composed of undressed stones placed together edgeways in coffin form, a large slab forming the bottom of the coffin, into which the corpse appears to have been laid, and then stones were placed above them as a lid. The coffins are all placed so that the faces of the corpses might look to the east, and are ranged in rows, with from 1 to 2 feet between each, and all on the same level. There are portions of three rows laid bare, and in one row there are upwards of a dozen coffins to be seen. The coffins were not air-tight, neither were the lids so closely fitting as to keep out the earth. The consequence is that they have all become filled with mould, but a very perfect skull was discovered, and portions of others.

GLENSEE, PERTHSHIRE.

[1829, Part II., p. 164.]

There are few places in the Highlands of Perthshire where a greater number of vestiges of antiquity are to be found than Glenalmond and Glenshee, two of the wildest passes into the Grampians, and the very centre of Ossianic ground. Several ancient tombs are to be seen in the district, which were brought to light on removing some of the cairns which are there so numerous. Two of these heaps were lately opened on the farm of Corrylea, on the estate of Captain Robertson, of Tullybelton,* in which some interesting monuments were found: the cairns were about 160 yards distant from each other. In the first there were three large upright stones, 4 feet high, and neatly joined together, the space within them being laid with smooth stones. In the centre of the same cairn (but whether surrounding or aside from the three stones previously described, our informant does not say) there was a circle formed of upright stones, 3 feet 8 inches high, the stones being distant from each other about 5 feet. Within the circle so formed was a belt of slate flags about 3 feet wide, and the ground thus enclosed an immense quantity of burnt ashes of wood and turf. Near the outside of this cairn there was another place the same as described, but of a smaller size. In the other cairn stood a large stone, 7 feet in length, 4 feet in breadth, and 3 feet thick, on which was cut a

* Tully-bel-tein, *i.e.*, the Hill of Bel's Fire.

representation of the sun, moon, and stars. In various places of the cairn there were found vast quantities of human bones and ashes ; and in the centre a place of about 70 square feet, enclosed by stones 3 feet 10 inches in height, joined closely together. The ground within this enclosure was full of burnt human bones, apparently run together into masses by the action of fire. Near the outside of this cairn were found four graves or pits, surrounded with smooth stones, and covered with flags, also containing human bones and ashes ; and, about 300 yards from the first cairn there was removed, a few years since, a hillock 60 feet in circumference, composed entirely of burnt bones and ashes.

Antiquities in Wales.

PASS OF KYN GADEL, NEAR LAUGHARNE.

[1842, Part II., pp. 472-474.]

I have lately, by the kindness of the Rev. Jasper Nichols Harrison, Vicar of Laugharne, in Caermarthenshire, been furnished with an account of a very interesting discovery which has been made near that place. It has been mentioned by me, in the "Notices of the Castle and Lordship of Laugharne" (communicated to the *Gentleman's Magazine* for July, 1839),* that in a natural cavern at Kyn Gadel, a pass through the cliffs, a sacrificial censer, or thuribulum, of bronze, was discovered, containing many coins of Carausius; that I had seen the relic, and that it is a beautiful specimen of British workmanship, as finely finished as any modern engine-turned vase. It will save much inefficient description to represent it in the annexed sketch. The censer itself is highly worthy a place in any collection of national antiquities.

It may be necessary to premise, that westward of the mouth of the river Taf, a fertile tract of marsh land extends for a considerable distance under the ancient limestone cliffs, which doubtless formed the original barrier against the ocean. This tract is known as "Laugharne Marsh," and has excellent pasture for cattle; innumerable rabbits have made their burrows in the sand hills which now preserve the marsh from inundation. About two miles from Laugharne a causeway diverges to the south, and passes between the hills to the marsh. This pass is called Kyn Gadel, on the west side of which is a bold, insulated hill, called Coigan's, perhaps from its having been part of the possessions of Milo de Coigan, who followed Henry II. into Ireland : a seat called "Llan Milo," or the enclosure of Milo, is not far distant. This conjecture, however, has no better foundation than the palpable inference to be drawn from the names the above-mentioned localities still bear. In a letter dated Laugharne, April

[* This communication occurs on pp. 18-22 : it will be printed in the *Gentleman's Magazine Library* in the volume on "Topography."]

19, 1842, Mr. Harrison gives me the following interesting account of another discovery at Coigan's Hill, near Kyn Gadel, where the bronze sacrificial censer is said to have been found.

"On the northern top of this hill, which is a rock of limestone, the quarrymen who were digging stone for the limekilns came to a kind of cell, scooped out of the solid rock, in which was the skeleton of a man, who, from the bigness of his bone, must have been a fine fellow in his day. They came to the opening of the grave (for such it evidently was) from the east side. The length of the cavity is about $4\frac{1}{2}$ feet; the breadth $2\frac{1}{2}$ feet; and the depth 2 feet. The skeleton was lying on its side, with its head towards the north, facing the east, the knees being bent up, so as to allow it to lie in so short a space. The length, depth, and breadth of the grave vary in different parts—I have given you about the average. It is dug, as I said, in the natural rock, and on the top of the grave is a huge stone, almost circular, and, I should think, about 5 feet in diameter, and from 10 to 11 inches thick. This stone is not limestone, but what the quarrymen call a "clegger,"* and must have been brought from the adjoining hill, with no inconsiderable labour to man and beast, precluding the possibility of the body being buried by stealth in such a situation. The top of the covering stone was about a foot below the surface of the earth, and round the edges of it a kind of dry wall was built. The whole was overgrown with turf, and quite concealed from the view, till, the opening being made at the side, displaying the skeleton, induced visitors to remove the turf and soil from the top, to discover the size of the covering stone. The soil, mingled with the stones in the cavity, contains numerous bones of birds, small animals, and snail shells."

Now, Mr. Urban, your readers will recognise in this account of the sepulchre lately discovered at Kyn Gadel all the indications of a primitive British tomb. The ingenious author of the "Encyclopaedia of Antiquities," following Sir Richard Colt Hoare, tells us that the most ancient form of sepulture was the deposit of the body within a cist, with the legs and knees drawn up, and the head towards the north,† exactly, it will be observed, the position of the body in the grave excavated in the solid rock at Kyn Gadel.

The rude wall which Mr. Harrison describes as surrounding the *clegger*, or covering stone, was, I doubt not, the foundation for the base of a tumulus of earth. The prospect from the site of the sepulchre is exceedingly fine, commanding a view of the noble Bay of Caermarthen on all sides. I have shown that Coigan Hill probably derived its present name from Milo de Coigan; but we may conclude that some obscure record of this ancient tomb and its tenant

* The term is Welsh, *clegr* or *clegyr*, a rock. See Richard's "Thesaur. Ling. Britann." in voce.

† Fosbroke's "Encyc. of Antiq.," p. 490.

is preserved in the appellation of the neighbouring ravine, *Kyn Gadel*.

As for the tomb of Misenus, a most elevated spot was chosen for this sacred deposit ; and it is highly probable that, like the promontory *Misenum*, the pass of *Kyn Gadel* might receive its name from the person here interred. Evidently he was of some distinction ; and the sacrificial censer found at the place we suspect to have been used at his funeral rites. I am by no means certain of the minute accuracy of the account which I received of the discovery of the censer at *Kyn Gadel*. I think it much more probable that it might be found in procuring limestone from the hill than hid in the recesses of a cavern. The coins of Carausius, said to be discovered with it, might lead to the conclusion that this tomb belonged to some admiral employed by that great naval commander on the British shores, and thus, like the Trojan chief :

“———— Ingenti mole sepulchrum
Imponit, suaque arma viro remunque tubamque
Monte sub aërio qui nunc Misenus ab illo
Dicitur, eternumque tenet per secula nomen.”*

Yet the singular position of the body would seem to indicate a much earlier period of deposition. Be this as it may, the Pass of *Kyn Gadel* was probably much used in the Roman-British times ; and the causeway was perhaps constructed to facilitate the landing of military bodies at this spot. I suggest that the appellation of the person interred on the hill above the pass of *Kyn Gadel* was the well-known Celtic one of *Cadell*, which, as derived from *Câd*, a battle, implies a warrior. *Kyn* is probably a corruption of *Cwm*, and thus we have *Cwm Cadell*, the Pass of *Cadell*, or of the Warrior ; the name of the person commemorated having been derived from his profession.

Of the individual interred near this spot, therefore, an obscure record is preserved by the few syllables of a local name ; though, indeed, it might seem that :

“ Deep the clouds of ages roll,
History drops her mouldering scroll,
And never shall reveal the name
Of him who scorns her transient fame.”†

One word, Mr. Urban, on the huge stone, the “*clegger*,” which seals the aperture of the warrior’s grave. This will be admitted to be a most ancient mode of securing the mansions of the dead. May not the flat tabular stone of the cromlech, often placed on supporters over graves, be supposed to have had its rise from the huge stone which usually covered the remains deposited below, and thus to indicate a sepulchre ?—just, indeed, as in our modern cemeteries an incumbent stone, shaped like a coffin, indicates a grave.

A. J. K.

* Virg. *Aeneid.* lib. vi., v. 232.

† “The Celtic Warrior’s Grave,” by the Rev. Canon Bowles.

Antiquities in Ireland.

PHÆNIX PARK, DUBLIN.

[1838, Part II., pp. 180-181.]

May 23.—A cromlech, or ancient tomb, was opened in the Phoenix Park, Dublin, near the Hibernian School. It consists of a large limestone slab, rough as if just taken from a quarry, supported by six lesser stones, and surrounded on all sides by lesser stones, which had evidently been removed from the bed of the Liffey. When the earth was withdrawn, it was found to contain two nearly perfect human skeletons, with a portion of another skeleton, and one bone, supposed to be that of a dog. All these remains were in a high state of preservation, the teeth nearly perfect. The molars of one skull were much more worn than those of the other. Both were the skulls of persons advanced in years. Under each skull was discovered a heap of shells common to the coast; the *nerita littoralis* was rubbed down on the valve with a stone, to make a second hole, apparently with a view to their being strung as a necklace. Some were strung with the root of a tree; a single *trochus* shell was likewise observed, the pearly covering of which was as perfect as if just picked up on the sea shore; near that lay a flint-headed arrow. The tomb was discovered in making a new road under the apex of a mound of earth 15 feet high, forming the segment of a sphere 120 feet diameter. The interior of the cromlech measures 6 feet by 5. It is of an irregular hexicon form. The original structure of that mound is supposed to have been conical, but owing to the operation of nature and the treading of cattle it had assumed the form of a segment of a sphere. There was also discovered in this place a white soft substance, phosphate of lime, part of the decomposed bones.

MAYO.

[1827, Part II., p. 548.]

Nov. 28th and 29th, in the townland of Mayo, and on that farm in the possession of Robert Martin, Esq., Kilbroney, were discovered six ancient urns, curiously ornamented, each containing a quantity of calcined bones. One of them contained a very small vessel, supposed to be a lacrymatory. There have now been discovered ten, within twelve months, in the townland and its vicinity, five of them in fine preservation; and also a small tomb, in form of a chest, 18 inches long and 12 wide, in which were found bones and an arrow-head of flint.

TYRONE.

[1802, Part II., p. 1185.]

The urn, represented in Fig. 3, was found in the year 1800, on the top of an old mount of earth called the "Moat," in the manor of Lindsay, in the County of Tyrone, about 8 feet under ground, in a

tomb 3 feet wide, 4 feet long, and 3 feet in depth, formed by a large flag of rough stone at the bottom, two side flags and two end ones of the same kind, and a large one over the top as a cover. The urn was full of a fine earth or ashes, so hard as to be obliged to be taken out with a knife, and a quantity of bones, seemingly burned, and fine earth or ashes lying in the tomb. Diameter of the top of the urn (a perfect circle), $4\frac{1}{2}$ inches; of the bottom, $2\frac{1}{4}$ inches; depth, $3\frac{1}{2}$ inches. It is in the possession of Mr. Lindsay of Loughry, lord of the manor, by one of whose tenants it was found as he was searching for a coal-mine.

The urn is made of burnt clay neatly fluted, and ornamented as represented in the drawing, which is the exact size, form, and colour.

The drawing was taken by a gentleman (by whose permission it is sent) for an intended history of the County of Tyrone; for which, by way of amusement, he continues to collect materials, but it is not likely soon to publish, for want of encouragement.

C.



Encampments, Earthworks, Etc.



ENCAMPMENTS, EARTHWORKS, ETC.

Traces of our Remote Ancestors.

[1861, Part I., pp. 498-507.]

MY residence for many years past has been fixed in a district of a somewhat peculiar character, and in which many advantages are rather more than sufficiently compensated by the presence of more than one considerable drawback. Thus, it is singularly wild, much of it equally picturesque and beautiful, wonderfully healthy, and sufficiently primitive in many of its customs and habitudes. On the other hand, the roads are simply astounding for hilliness and badness, and what is usually understood by the term "neighbourhood" is not simply non-existent, but much more really impossible than the mathematical quantities so called. The district I refer to is a considerable section of the more easterly moorlands of North Yorkshire, and embraces many thousand acres, included in the parishes or townships of Skelton, Guisborough, Westerdale, Danby, Glaisdale, Egton, Sleights, and Whitby. Much of this moorland country is very familiarly known to me, and there is but a small portion of it which I do not know or have not visited at all. I may, however, specially mention the moors of Danby, Glaisdale, and Westerdale as not only those which I know best, but as supplying me, in the course of continual expeditions—parochial, shooting, "constitutional," or connected with a taste for natural history—with no small part of the materials for the following communication.

The traveller who traces the high-road from Guisborough to Whitby passes across the entire breadth of the district in question; and, out of the twenty-one miles which lie between those two towns, fourteen at least stretch their weary up-hill and down-hill length over the moors. As he looks back from the newly attained moorland level at Birk Brow, the grand fragment of the choir of the Priory Church of Guisborough—all that is left of the entire building—arrests his eye.

As he reaches the eastern limit of the moors he comes in sight of the more extensive ruin of Hilda's Abbey Church at Whitby, once as glorious for beauty as the loftier pile at Guisborough. Both of these conventional remnants are "relics of antiquity :" and yet both are "infants of days" contrasted with the memorials of hoariest ehd with which a great extent of the wide moors between the two points of view just named are everywhere garnished. For miles together they are bossed over with the monuments of dead chieftains of twenty-five or thirty centuries ago : some as perfect in form and material as when newly piled by the mourning tribe over the still warm ashes of the funeral-pile ; others broken into or excavated across by the antiquary, or carried piecemeal away by the rude engineers of those inconceivable moor-roads. From some points twenty or twenty-five of these sepulchral piles may be seen, none of them of less dimensions than 25 to 30 feet through, and many of them twice or three times that ; in other places they stand so thick, although often of small size, that the surface seems, at some former day, to have laboured under a severe eruptive disorder, and to have had a wonderfully favourable crisis. "Standing-stones," too, or monoliths—and who can venture to guess how many have been removed bodily by the country road-makers and wall-builders ?—are there, deeply scarred and furrowed, though with no mightier agency than that of the slow tricklings of water-drops ; conical hills of great size, some nearly natural, others certainly indebted to man's art for part of their symmetry, if not for their entire bulk ; circles of stones, some ring within ring, which once, no doubt, were shrines or temples ; camps, embankments, fosses, and—more interesting still—the sites of collective habitations formerly occupied by our British or Celtic ancestors, almost surely before Isaiah prophesied, probably before Samuel was born, and even not impossibly when Moses led the Israelites through the Red Sea.

For no trace of metal, that the writer has been able to hear of, has ever been found in any of these sepulchres at present under notice. A few bronze weapons and other implements of the Archaic Bronze period were found, some thirty years since, on Roseberry Topping (a conical hill about three miles from Guisborough), and others elsewhere in North Yorkshire ; while iron wheel-tires, and iron relics of horse-trappings and of the rim of a shield have been taken from tumuli not far from Market Weighton in the East Riding ; but on the wide moors I am speaking of, I believe only flint arrow-heads, and rude jet ornaments bead-like in shape, and ruder half-baked urns, with a few hammer or axe-heads of hard whinstone or quartz—all of a remote era of the remote Stone period—have been met with ; no relics even of any application of bone, so far as I am aware, having been as yet found.

The extreme abundance of these British or Celtic remains in parts

of the district in question seems mainly to be due to the fact that so very considerable a proportion of the whole extent is as wild and unaltered by the hand of man (save only in the destruction of the forest which must once have covered extensive tracts of these moors), or by the advance of agriculture, as it was 2,500 or 3,000 years ago ; but perhaps not a little also to the fact that there appears to be no doubt, from ancient historical records, and no less from modern extension of agricultural limits, as well as from the revelations or discoveries consequent on modern agricultural innovations and improvements, that the "Dales" as a whole were, from an early period, choked with forest growth wherever they were not smothered with deep, treacherous, quaking bog, or wet, inhospitable morass. Nay, in multitudes of instances the evidence alluded to goes to prove that forests had grown up, flourished, died, and fallen, and, by their fall, probably led to the existence of a deep bog which serves now to entomb their remains. Take one parish—my own—of some 23,000 acres in extent, and of the ancient Celtic remains in which I propose to speak principally in the ensuing pages—and, at the time of the Conquest, we find only about 1,300 acres liable to be taxed, as being cleared, and in a certain sense under cultivation ; and what that cultivation was may be inferred from the circumstance that the Doomsday surveyor's estimate was, that there was land in the entire manor for seven ploughs ; all the rest was forest and moor, and the former encroaching enormously on what is now the latter. Moreover, by that time probably, or almost certainly (though for how long a time we cannot even guess), the woods had been laid under contribution for smelting the iron-ore which is found so abundantly in the entire neighbourhood.

So that the ancient British occupants of the district, whose best weapons against the forest were clumsy whinstone or quartz axes, perforated with inconceivable labour to receive the helve, must have been driven to such parts of the moor as were sufficiently dry and open, and to those few places in the valleys which, by the absence of wood and marsh, permitted them to form their huts and pasture their scanty herds.

A line drawn nearly parallel with the general direction of the high road from Guisborough to Whitby, and at a medium distance of eight or nine miles from it, would very nearly coincide with a sort of natural axis of high lands dropping from 1,485 feet above the sea at Bottom Head, 1,000 at Lilhoue Cross, and 800 at Stoup Brow, half-way between Whitby and Scarborough. From this axis or watershed, along its whole length, the high ground falls gradually towards the north, and sends forward several long, irregularly shaped spurs, generally of inconceivable width, projecting into the main valley of the district—that of the Esk—and creating a succession of deep, narrow valleys, all debouching in the main or central one. All of

these spurs, to the number of eight or nine, were fortified—two or three of them very elaborately—against attack from the south. Some of these fortifications consist of single ramparts formed of earth heaped over collected stones (many of them of enormous size, considering the forces admitting of application to their removal), and are 20 to 25 feet thick at the base, and even now, with what more than twenty-five centuries have done towards filling up the ditch and degrading the crest of the vallum, 8 or 9 feet high. Others have been so constructed as to present to the enemy a rugged stone face—the stones composing it being built in, in a Cyclopean kind of style, and firmly retained in their places by the heaped-up earth upon and behind them—and were further strengthened by planting a series of large, pinnacle-shaped stones along the crest to serve as battlements. Others, again, have a strong, thick vallum on each side of an intermediate fosse : or perhaps two fosses and three embankments in places where greater strength seemed to be required. Two or more of these ramparts, one some little distance in the rear of another, serve, with the aid of circular or irregularly shaped “camps” of no great size, as the defences of all these projecting points or bluffs ; and, though inconsiderable in point of length and general magnitude, in comparison with others of a later date at some distance from this immediate district, still they must have been executed at a cost, to a tool-less community, of manual labour and time which appears almost inconceivable.

All these sets of fortification seem to have been planned and constructed for the protection of a series of settlements, or collective habitations of a tribe, or section of a tribe, of the ancient Hill-Celts.

Several distinct and unquestionable sites of such settlements—I do not know if we are justified in applying Cæsar's word to the collective abodes of men who lived so many generations before him, and say, “several sites of indisputable *oppida*”—still remain in the part of the district that is protected by these various intrenchments. There is one in Westerdale, another on Danby North Moors, a third not far from Egton Grange, a fourth on Goathland Moors, and all these independently of others, about which there can be no doubt, that, being situate more in the valleys, their every trace has been swept away by the operations of the agriculturist. It is indeed wonderful that the settlement in Westerdale has escaped similar destruction ; and the fact can only be explained on the ground that the site is in such a position as to offer no great encouragement to the labours of the ploughman, and that, consequently, time and the feet of cattle being the only agents of obliteration at work, it has remained until now, and even little altered during the lapse of the last six centuries.

The most interesting and instructive site is that on the Danby Moors. For the following account of this remarkable spot I am

partly indebted to a MS. report of an investigation by a party of gentlemen twelve or fifteen years since, but not less to my own personal and repeated examinations. The site consists of a collection of pits: these pits are circular in form, and divided into separate groups; but every group is arranged in two parallel lines—pit over against pit; an arrangement which is deviated from, in one or both particulars, in other sites, both here and elsewhere.

All of these excavations have been from 4 to 5 feet deep, as compared with the present surface of the surrounding moor; all of them paved at that depth with stone, and probably rough-walled with uncemented stone within as well; and from 10 to 12 feet in external diameter.

There are two principal groups: one composed of two members, or streets, not in exactly the same straight line, and with an interval of 25 feet between their several terminations; the other, which lies beyond a small stream, and above the verge of the slope towards it, is smaller in dimensions; and, about a hundred yards to the south of this, is the supposed commencement of another. This contains six pits; the one to the north of it thirty or more,—some, it is supposed, having become indiscernible through lapse of time and its effects; that on the further or western side of the stream is larger, and numbers sixty-eight excavations in all, thirty in one division and thirty-eight in the other. This range is broader by some feet than the eastern group, which is 50 feet from side to side; that measurement includes the walls, formed of earth heaped over stones and fragments of rock, and each 2 to 3 yards thick, which enclose the sides of each group of pits. In the larger sub-group of the western division one of the excavations in the south row is of much greater dimensions than any other in the assemblage, being not less than 35 feet in interior diameter; and on coming to it the enclosing wall, which, if continued, would pass through its centre, sweeps round it in a semicircle and then continues its rectilineal course. But the enclosure of the pit in question is completed by the addition of an interior semicircular wall. This interrupts the regularity of the "street" in this case. In each of the other groups the street is perfectly straight and even. The ends of the rows, or so-called streets, are open in every case: although in one instance the two pits at the end are placed nearer each other than the remaining ones, so as to contract the entrance to the interior. If all were placed end to end the total length would be from 1,200 to 1,300 feet.

To the south of the main group lie three tumuli in a line, of large dimensions, being 70 to 80 feet in diameter. Another tumulus, much broader but more depressed than either of the other three, stands about 60 yards from the eastern termination of the main group; and about 300 yards to the north of it stands a monolith, or "standing-stone," or "Druidical pillar," as such objects are variously

called. The tumulus last named is *not* sepulchral. From the fact that it is enclosed with a ditch and circular bank or ring of earth, it was assumed to be of a different nature from the other three, which are ascertained to be sepulchral; and, on examination, no signs of its having ever been used as a place of sepulture were discoverable. It held, there is every reason to believe, as close a relation with the political, and possibly with the religious and judicial, observances of the living inhabitants of the settlement, as the other three did with the long home and memory of deceased distinguished members of the community.

The settlement at Westerdale is about 1,000 feet long by 300 broad, but the pits are much more scattered and indefinable. Indeed, many of those which are within the limits of enclosure are almost or totally obliterated. For six hundred years or more this site has been known by the name of "Ref-holes."

The settlement on Snowdon Nab, near Egton Grange, 500 feet by 450, is set very full of circular pits (except in the central space left vacant), which are in many cases excavated through thin beds of sandstone and shale, the exterior rows being set in a zigzag form. Where the ground penetrated was not rocky; they seem, from traces still or lately left, to have been walled round inside like a well. This group seems not to have been protected by any closely adjacent rampart or defence; but at the period of its occupation it was probably surrounded by dense forest, which, it hardly need be suggested, might easily be made to afford the strongest sort of fortification and defence.

The Goathland settlement occupies a space of 600 feet by 150, but the pits are not so thickly clustered as in that last named. The name by which this site has been known, time out of mind, is "Killing-pits."

Besides these, several others might be named; but, as their inhabitants would seem to have been cut off from communication with those that have been already specially named, either by defensive fortifications, or by position, or (still more) by time, it would only occupy space to little purpose to notice them in detail. It seems, however, to the writer that a few lines should be given to a glance at one extensive cluster, which occurs almost as much to the south of the axis or ridge-line named above, as several of the fortifications, also above-named, lie to the north of it; and which from their different shape—or shapes rather—and more elaborate structure, suggest the idea that they were possibly occupied, either at a period of somewhat greater constructive skill, or else by a branch of a different tribe from those who dwelt in our more immediate district: so that, consequently, it may have been against their incursions that those frequent ramparts were designed and reared. The dwellings in question occupied a space of 1,400 feet by 300, and the pits are of all shapes—

circular, oval, semilunar, and the like ; of large dimensions also, both as to area and depth ; in some cases divided into two or more apartments by partition walls, and all so strongly lined with stone, that "Stone-haggs," as the place is called, has served as a quarry to the country road-makers for a lengthened period past.* Their walls indeed, in some cases, seem to have risen quite above the level of the surrounding moor ; and thus, as well as in the other particulars named, they appear to have been unlike those which have hitherto been specially named in this communication, and to which we must now return.

The condition of the Danby Moor settlement is, in few words, this : Out of the total number of 104 pits which can be distinctly made out, the outlines of all, save some half-dozen, may be traced without any difficulty. A few are not so easily distinguishable, and would pass unnoticed but for their vicinity to, and evident connection with, the others. All, except those in which exploratory excavations have been recently made, are more or less grown up with vegetable matter. In all of them, on excavation, charred pieces of wood are met with upon the stone floor ; but so far, I believe, no other traces of occupation. What a systematic examination might do remains to be proved.

These curious and interesting remains enable us to reconstruct, in idea, the Celtic village, or *oppidum*, of seventy-five or eighty generations ago. Rudely dressed poles from the surrounding forest, with their ends resting on the upper part of the rough interior stone-lining of each pit, and all meeting in a point above, with wattled work filling in the interstices, and all thatched or covered with rushes or ling, and perhaps an outer envelope of sods, presenting the form of a depressed conical mound to the beholder's eye, with a hole at the side to permit the smoke of the fire in the centre to escape, as well as to afford exit and ingress for the inmates ; this would be what was noticeable about each individual hut on the outside ; the chief's house differing from the others in little save its greater size and elevation outwardly, and in possessing one or more roof-sustaining props or posts within. From the exterior of the enclosing rampart of stones and earth little would be seen besides the loftier house last named and just the tops of the ordinary huts ; the walls of enclosure—crowned, as they surely would be, with rough palisading—being amply high enough to cover all within from too curious inspection. At night, or when danger threatened, the ends of the streets would, of course, be closed with abattis of some sort, or with other means of

* That period, however, fortunately for "Stone-haggs" and other like memorials, does not extend beyond the memory of many persons still living ; so recent are all or almost all our roads in their modern form. Up to nearly the beginning of the present century roughly flagged narrow causeways, traversed by pack-horses, supplied the means of intercommunication.

barricade, sufficiently strong to repel a sudden attack, and at the same time such as to admit of easy removal from within.

One other feature still recognisable and connected with the habits of this community remains to be noticed. In the valley between the eastern and western groups of hut-sites is an enclosure, divided into two parts by the little stream already noticed, and very similar in its present appearance to what are ordinarily termed camps ; that is to say, formed of earthen embankments with a stone basis, but which, from its position, can never have been in any way connected with attack and defence. The most probable supposition with reference to its use or purpose is that, when its walls were perfect and crested with firmly-set palisades, it served as a place of security for the cattle of the settlement ; and from its dimensions it would seem to hint that, in proportion to the probable number of the entire community, their stock could not have been so very few.

The arrangement of the separate dwellings and their dimensions, in all these several settlements that have been under notice—none of them (except the so-called chief's) on the average exceeding 15 or 18 feet in diameter, and most of them coming sensibly below that—give rise to a suggestion which may well insinuate a doubt as to the correctness of a statement made by Julius Cæsar, and probably repeated on his authority by later writers—I mean the allegation that it was customary among the Britons for ten or twelve men to have their women—one can hardly say wives—in common. These separate huts, each equivalent, and only equivalent, to the shelter of a single family, seem to tell a very different tale ; while the regularity observable in the parallel rows, and not less in the opposite or alternate huts in the rows, seems even to testify to a prevailing sense of fitness and order in these ancient members of the human family. Rude, fierce, unskilled in any art, save those of war and the chase—in one word, savage—as these Celts were, still these strange hoary memorials certainly suggest that they knew and respected the marriage tie and the sacred bond of family.

The chief's hut, to the writer, whose pursuits continually conduct his steps over and among these primeval remains, induces a comparison with a particular ring or enclosure on the third of the ridges or spurs named above, beginning to count from the west. The ridge is most carefully fortified ; at the narrowest part of it, and somewhat over a long bow-shot from the rise of a hill, which sweeps back to the line of greatest height beyond, is an entrenchment, consisting, towards its eastern end, of a double dyke and ditch between, and of three dykes and two intervening ditches along its western portion. In rear of this is a nearly circular entrenchment or camp, which may have served as a rallying-point in case of losing the first line. Again, somewhat more to the rear, there is a single dyke, crossing the whole width of the ridge, and originally of considerable dimensions, but

which has been quarried away by little and little by road-makers and others, until in many places only a broad belt of brackens and a few stones, too big to be removed, remain to show where it stood. Two or three hundred yards to the rear of this, again, was another single dyke, extending two-thirds across the spur, and commencing from the western edge ; and below that a fourth, commencing on the eastern side and reaching far enough across to overlap the extremity of the last. And what is curious, this fourth and last is also continued down the exceedingly steep face of the eastern bank to the edge of what must have been, till within the last century or so, an impassable bog. Here it rests upon and is supported by a series of two (or perhaps three) camps, so constructed as to defend one another, and be separately defensible in succession, if the first of them happened to be taken.

Now, behind the second of the ramparts just named there is a ring of stones (denuded by accidental causes of their one-time covering of earth), with a depression or hollow within, of about the same dimensions and general appearance as the chief's house, and which the writer conjectures may probably have been the permanent headquarters of the chief intrusted with the command of the garrison defending this evidently most important post. For other things besides those skilfully devised and elaborately constructed entrenchments serve to show that it was important. Literally hundreds of tumuli covered the face of the moor there, beginning to be numerous behind the second line of defence ; two or three here and there in the rear of the compound or main rampart suggest the ideas of a struggle with an invading party and of victory resting with the defenders,—ideas the likelihood of which is not lessened by the appearance of one or two small rudely formed hillocks outside the defences. Then, there is also an earthen ring with its usual substratum of sand-stone, 42 feet in diameter, in the eastern limb of which still stands a "Druid-stone," 5 feet high above the surface, broad, and not more than 8 or 10 inches thick ; channelled and furrowed, along its upper and southern edges, an inch deep, by the insignificant energies of drops of rain, and condensing fogs, and melting snowflakes. Sundry gaps besides show where other such stones stood ; but a moor road sweeps close by and explains alike the departure of the others and the retention of this. It is useful to indicate the track when hidden by snow, as they were to furnish its "metal."

Can we in imagination repeople these wastes — these desolate hearth - places of mysterious antiquity and power of enduring ? Perhaps, in a measure, we can. That wood of forty-five acres, and chiefly of oak, clothing a part of the bank which descends from the moor to the north bank of the Esk, nearly opposite to the site of the first baronial fortress raised in this locality, the sole remnant of the 10 or 12 square miles of forest in which Norman De Brus and his

retainers revelled in the pleasures, and excitements, and risks of the chase, gives us a starting-point for the imagination ; and we see the whole valley down to Esk banks, together with its offshoots (mainly on the south), full of varying growths of wood—birch, rowan-tree, oak, fir, alder ; the first two highest and straggling over the summit, the last lowest and predominating along the marshy banks of the stream and the edges of the many open, jungle-looking spots, which are simply bog or morass, with their rank and accustomed herbage. And the stately red deer is there, and the timid roe, and the savage, champing wild boar ; and here and there in the glades are wild-looking oxen, of a whitish cream-colour with black muzzles, and long horns wide-set. The goat, too, is seen higher up on the banks, and the stealthy wolf prowls there also ; while smaller game, and perhaps, in remotest eld, larger beasts of prey than the wolf are hidden beneath the wilder, thicker coverts.

And the human hunter, with matted, untrimmed hair and beard ; with rough, undressed skins for garments, so far as he is garnished at all ; wild-eyed, and with glances wavering and thrown round in unceasing, restless watchfulness ; not large in stature or of stalwart form ; with head and features betokening no intellectual excellency, but the contrary ; armed with a bow and rude basket-work quiver of much-prized arrows, and with a javelin headed, like the arrows, with neatly chipped, sharp-edged flakes of flint or agate ; with a rude axe or celt also, wedge-shaped, and hafted into a partly cleft or perforated club ;—that is his equipment. And we see him, stealthy as a beast of prey dogging its intended victim, creeping, instinct-guided rather than intelligence-led, upon the unsuspecting deer or roe ; and the bow twangs, almost at the creature's ear, and the primitive arrow does its work.

Or we might picture him as animated by the fierce passions and instincts of the savage warrior ; one while seeking to steal with silent, treacherous advance on the unsuspecting foe ; again, with his intensely acute senses of sight and hearing on full stretch, in order to detect the possibly lurking enemy or to avoid the risk of surprise ; and then engaged in fell death-struggle, as savage, as unrelenting and inveterate, as reckless of all but the passions of the strife, as the veriest wild beast of his own forests.

Or we might represent him at the gathering of the tribe about the sacred rath, and listening to, perhaps proceeding to execute, the solemn edict or decision of the warrior-chief ; a chief doubtless by the right of the readiest, strongest, most unscrupulous hand. Or else, as one among a band of trembling votaries, drawing near to the rudely pillared enclosure-temple, canopied only by the blue vault of heaven, and swayed by terror, or blind hope, or ruthless savagery, at the will of the stern interpreters of a dark and merciless superstition.

Or a chief is dead, and we see a pyre constructed, dead trees being

knocked rather than hewn in pieces by the awkward axes of basalt, resembling a heavy geological hammer in shape. And the corpse is placed upon it, and, amid the sacred song of primeval occupants of the priestly office—not as yet, it may be, denominated Druids—as they celebrate the dead man's deeds, it is consumed amid the leaping flames. And then the calcined remains are collected and placed in one of those rude cinerary urns which are guiltless of potter's wheel, and indebted to a pointed stick for their ornamentation; and, together with the incinerated fragments, is placed a smaller urn, containing we know not what. His weapons, too, are there, and his scanty ornaments, and all placed together in the rude cist, made of unhewn stones, covered with another as rough and little flag-like as they. And then, over all, on the very site of the pyre, are piled stones and earth, till a heap is raised which shall outlast the costliest, most elaborate mausoleum of other climes.

Or perhaps he is a greater man—that dead man—or one whose person is more sacred than often passes away from among his people; and his body is not to be burnt as in other cases, albeit those of certain of his slaves, perhaps of some nearer to him yet, will be consumed in a circle round the rude sarcophagus which is destined to hold his mortal remains, and a larger urn is placed with him, containing food or some offering to his deities. There is a thronging multitude to assist at the obsequies, and to help raise the mighty mass which shall tell his successors for thirty successive centuries that one who was once a great one of the earth lies entombed there.

Why should we task fancy to repicture the women? They were probably more degraded in mind than the men, unclothed, long-haired, prematurely withered—meet helps and mates to such lords. In one word, they must have been the “squaws” of White hunter and warrior savages, instead of Red ones.

[1863, Part I., pp. 22-27.]

In the *Gentleman's Magazine* for May, 1861 [*ante*, pp. 168-169], reference was made to the numerous barrows or grave-hills—locally termed “houes”—scattered over the moors of the Cleveland district of North Yorkshire. Since the paper containing the reference in question was written, the author has had opportunities of making himself acquainted with the interior of several of these houes; and it is possible that what he has observed and collected may not be without a certain measure of interest.

Besides being very numerous, the houes are very much diversified as to size, materials, shape, construction, and general plan. Not a few of them are of the so-called “basin-houe” class. Some few are besides enclosed and kept up round their base by a circle of large rude flags, or at least flat-sided stones, set edgewise. Some are 60 to 90 yards round the base, and 7 to 12 feet high at the centre, and

beautifully symmetrical. Others are 6 to 10 yards in diameter, and nowhere raised 3 feet above the natural level of the surrounding soil. Some, again, are mere raised mounds, from 40 to 60 feet in diameter, with scarcely any pretension at all to symmetrical structure. In a few instances the material employed seems all, except the eight or ten inches of superficial soil, to have passed through the fire—nay, even to be chiefly composed of layers of ashes and charred matter, due to peat (or turf) and ling, and sand burned to a white hue. In other cases, again, few traces of the action of fire are discernible—at least not until the deposit of calcined bones is nearly approached, when a small collection of charcoal is met with; while a third variety is, so to speak, built up of incredible quantities of stone, all deeply reddened, and no little of it disintegrated, by vehement and long-continued heat. In yet a fourth kind, stone, or rather fragments of stone, from the dimensions of a few cubic inches to as many feet, form the chief constituent elements of the grave-hill, usually thrown together with very little care for arrangement, but now and then found to have been piled with a regular or systematic design.

In no instance, so far as the writer has seen or has been able to ascertain, has a cist or chamber of the ordinary character been found, viz., four or more flags set up on edge and covered in with a fifth. In one instance, several years since, a walled chamber, somewhat oval in outline, was discovered;* and the writer has seen what he conceives to be the traces of one or two similar cists on the sites of houes destroyed long since for the sake of their materials. Ordinarily, the calcined bones of the entombed Celt are either contained in a cinerary urn, unprotected by any systematic structure of stone from the superincumbent and encompassing soil, the urn frequently placed mouth downwards; or else placed in a small hollow in the substance of the hill, and partly or entirely covered by a flagstone of small dimensions.

Almost everything the writer has been enabled to investigate is

* The houe in which this cist was found was of remarkable character in two ways: first as to structure, and next as to name and the tradition still attaching to it. It was raised to a height of seven or eight feet above the soil, and was of sufficiently large dimensions to admit of a circle of stones (standing three to four feet above the ground), of at least eight or nine yards in diameter, upon its upper rim. The cist was walled on the same principle as a well (of course without cement), and was nearly five feet one way by about three feet the other. It was followed down for five or six feet without discovery of urn or other deposit.

The name (still preserved, although the houe has been removed bodily and its site cut across by a walled fence) is "Gallow Houe," and the tradition, that a gallows actually stood on or near it, in times gone by, and had not stood there for nothing. For miles round, on every side but the west, the manors were owned by the De Brus family from an early period after the Conquest; and the adjoining village of Castleton takes its name from the castle (an early Norman structure) built by them to maintain their power and possessions in this part of the district. And as they undoubtedly did possess the usual feudal rights, in more than mere probability both name and tradition noticed above are justified by fact.

such as to prove entirely confirmatory of the opinion expressed to him by the late Mr. Bateman,* in a letter bearing date January 31, 1860. All these grave-hills, from the character of the inclosed pottery, and the few and rude flint weapons accompanying the deposit, are of a "relatively early period in the indefinitely ancient Celtic age." In one instance the only arrow-head found—it was close beneath the inverted urn—was an extremely rude one of porphyry, and not a trace of flint was anywhere discoverable, though the search has been since renewed.

In one of the "basin-houes" lately examined by the writer with considerable care and vigilance, the method of construction appeared to be as follows:—A large stone, about 2 feet square by $2\frac{1}{2}$ long, was either selected as already *in situ*, or set by design in the soil of the chosen site of the intended tumulus; probably, as it lay in rather a sloping manner, it was there already. A little to the south-west of this stone the calcined bones of the dead man were laid, in a thin stratum, 14 or 16 inches long by about 8 broad. A small thin flag was laid over part of them, and then commenced the building of the hill. First, a ring of ashes and sand and commingled charcoal; of perhaps 3 yards mean diameter (about equal to the extreme diameter of the "basin" above when the hill was finished), with the stone for its centre, and overlying the ashes of the dead: this ring was the nucleus of the entire work. Layer over layer was now placed upon it, only with a very gradual and still widening slope on the outside, and a much shorter and more abrupt one internally. Sand and gravel, with very few stones (except on the outer flanks of the hill, in the later stages of the construction), and with occasional thin layers of material consisting mainly of ashes, discoloured sand, and charred matter, formed the mass of the entire mound. And the work was completed when the hill had reached an altitude of 7 feet (probably 9 or 10 when the pile was newly heaped, and before its inevitable consolidation and consequent subsidence), and spread over an area of 55 yards in circumference; the basin above being about 18 or 20 inches deep at its centre. This hill literally abounded in flint. Flakes, rude arrow-heads, chipped blocks of small size, were met with in quantities; as also two or three circular cutting implements, rubbed down and polished after being chipped; all mixed up in the general material of the houe, and especially at about 6 or 8 inches depth, or just where the black soil of the surface was beginning to be replaced by the piled-up sand. This was the more remarkable, partly because a very minute and indistinguishable trace of metal was found among the bones, and partly because in four or five other hills, all within a quarter of a mile from this, flint was found in very small quantity

* For a memoir of this gentleman, and a notice of his latest work, "Ten Years' Diggings in Celtic and Saxon Grave-hills," see *Gentleman's Magazine*, Oct., 1861, p. 450.

indeed, and in two cases not any trace whatever could be discovered.

In another tumulus of somewhat less area than the last, but fully equal in height, situate (with three others) on a ridge about a mile to the westward, the principle of construction was as widely different as can well be imagined. The natural soil had been removed to some little depth, over an area of 12 feet in diameter. In the centre of this area two flat slabs of stone had been set up, with their ends resting against each other, just as in building a "card-house" the two first cards are placed resting against and so as mutually to support each other. Then, leaning against the edges of these, and approaching each other above, two other flat slabs were placed, and round the nucleus thus obtained a succession of stones was piled, on the same principle, until a kind of first story of equal dimensions with the cleared area was completed. On the platform thus obtained, a second and similar story, but of less diameter, was constructed ; and on this a third, smaller again ; and so on, until the pile was finished with an upper surface of about 4 feet in diameter, the perpendicular height of the whole being not less than 9 feet. In different parts of this elaborate structure (reminding one, and especially with the circular action of the arm employed by a working man in describing it, of the old prints of the tower of Babel) there were contrived four small cists or chambers, each containing a deposit of burnt bones and charcoal. Besides, an urn was found, very soon after the excavation was commenced, near the southernmost member of the houe, filled with calcined bones and charcoal ; and the fragments of another in a different part. The whole pile of stones was covered with a considerable thickness of stony earth, so as to give the houe-form to the entire structure. Probably the urns both belonged to secondary deposits.

Again, a third barrow, lying about a quarter of a mile to the south-east of the basin-houe first described, was examined by the writer on the 5th and 7th of November. There were some suggestions about the surface, a little to the north of the centre, of a previous disturbance of the hill ; which hardly seemed to be weakened by the discovery of considerable quantities of charcoal at the depth of only a few inches from the outside. Commencing a trench from the north toward the centre, it almost immediately became apparent that the tumulus was of a composite character. The left side of the trench passed through heaped sand, the right through a pile of loose stones with open interstices. Charcoal was found abundantly on the floor to the right, none at all to the left. Attention was principally directed, therefore, to the cairn part of the hill ; but as the trench had to be pushed forward toward the centre for the purpose of obtaining working room, a chance stroke of the spade revealed the presence of much charcoal on that side also, some distance above

the floor; and a second discovered an urn well filled with clean burnt bones, and in an inverted position. The uppermost part of it could not have been 15 inches below the surface, and it was quite unprotected by stone-work of any kind from the pressure of the overlying earth. The latter, however, seemed to have been hardened by some means or other so as to form a slight kind of roof. On removing the surrounding sand and charcoal, a very beautiful urn, of about 9 inches high by 7 inches in diameter at the mouth, was laid bare, perfect on one side, but with the other distorted and crushed (partly inwards and partly out) by the pressure of the overlying earth. It is of very fine ware, elaborately decorated round the rim in *quasi* panels, by short horizontal lines alternating with vertical ones, all formed by pressing a twisted thong into the soft clay. Below the rim as far as the rib plain strokes in a reticulated pattern form the ornamentation. In close contact with this urn was found a javelin-head, much blunted, of reddish flint; and, in the charcoal just within its mouth, two splinters of some other flint instrument, flown in the burning. [See *post*, p. 224.]

Turning next to pursue the indications given on the west side of the trench, a second urn, also inverted, was before long found, with its mouth sunk a little below the level of the natural soil. There was no cist, and the stones which lay nearest round and above it were of no marked dimensions or character. One or two lay in contact with the urn, and part of its exterior had been abraded by their pressure.

On removing this urn it was found to be perfectly empty, of less size than the last, of very much coarser ware, and at least twice the thickness. The rim, which is rather deep in comparison with the whole height, is marked with six or seven longitudinal impressions of the twisted thong. Further careful search showed that the urn had been inverted over a deposit of simple charcoal placed in a circular-shaped hole, 8 inches in diameter by 12 or 13 deep, sunk in the natural soil. There was not a vestige of bone; but in the uppermost layers of charcoal a splinter of what had probably been a quartz hammer or axe, and a very rude arrow-head of porphyry. Not a vestige of flint could be discovered anywhere.

A comparison of the urns, and of the accompanying weapons, at once suggests the idea that the urn first met with is a secondary deposit, and that the vase found second belongs to a comparatively most remote period of the Celtic era.

The dimensions of this tumulus were 37 feet in diameter, with a central height of about 2 $\frac{3}{4}$. Very near it lies a so-called camp, 82 feet in diameter, inclusive of the vallum, which is 16 feet in thickness at a point where the distance through it is least. On the opposite side of the enclosure the base of the vallum is not less than 23 or 24 feet through; though it may be surmised that this greater width is in

some measure due to a removal of part of the crest of the bank, and the deposit of the moved matter at its foot.

A somewhat similar enclosure, or "camp," is seen close to another tumulus situate about half a mile to the south-west of this just mentioned. It is, however, oval instead of circular, and with a longer diameter of about 38 yards within the vallum, which is about 4 yards thick at the base. The tumulns near it is nearly 50 feet in diameter, and nowhere so much as 4 feet in elevation above the surrounding moor. It is also a mere mound, with no regular or defined slope from the edge to the centre. Sand, ashes, and charred matter (probably ling or turf) are the constituents of which it is formed; and, on examination, it was found to contain a deposit of burnt bones, in an entirely plain urn of 12 inches high, by 9 $\frac{1}{2}$ across the mouth. This urn, too, was placed mouth downwards upon charcoal just above the natural level, and with absolutely no protection from the pressure of the superincumbent and adjacent soil: still it was entire. It is of much more friable ware than either of the others found in the neighbourhood, but maintains its shape almost unchanged. The actual discovery of this urn was made by the cutting of a piece completely out of the bottom and side with a shovel; and at first sight it appeared that all the bottom and parts adjacent had never been fired at all, for there was a smooth surface of perfectly plastic yellow clay exposed in the clean cut made by the tool, while all the parts about the rim, and as far as the rib, appeared to be fairly baked. Closer and more deliberate examination, however, showed that the plastic clay was merely a cap carefully applied and kneaded to the bottom and lower sides of the urn, with the view (beyond doubt) of throwing off whatever moisture should chance to percolate through the overlying soil: a precaution so effectual that the rains of twenty-five or thirty centuries had had no power to penetrate to the dry calcined bones enclosed. This is the only instance of the kind the writer has met with; and it does not appear from the late Mr. Bateman's book that any precisely analogous one had offered itself to his observation. Not many feet from the urn just named, a second deposit—apparently a secondary one—of burnt bones, protected only by a flat stone about 12 inches square, was found. But neither with it, nor with the urn, nor in any other part of the tumulus, was a trace of wrought flint, or any fragment of flint save half a small rolled pebble, to be discovered. As far as one can conjecture from the characteristics of the urn, the interment must have been of very remote antiquity.

Since the earlier part of these notes has been committed to paper, the writer has discovered, on a different part of the moors, undoubted traces of dwellings precisely similar to those mentioned in his former paper (alluded to above) as situate on the Danby North Moors, only very much fewer in number. He believes they have never hitherto

been noticed ; but it is quite possible now that others also may be traced in or near the same locality.

Further Diggings in Celtic Grave-Places.

[1863, *Part I.*, pp. 440-444.]

On the moors mentioned by the writer in his former communications are many ancient enclosures, the usual terms for which are "Druidical circles," or "camps." Thus, on the ridge which lies to the east of the writer's residence there are still four of these enclosed spaces, while on the moors, a little further to the north, there are as many more. Usually these enclosures are circular in form ; but in three of the instances on the north moors they are oval, and in one of the others nearly, but not regularly, circular.

The term "camp," as applied to any of these enclosures, appears to be misplaced ; for, speaking generally, the enclosing ring or work is too slight and low to have afforded any effectual defence ; and, besides, the dimensions of the space enclosed seem to be too small for a place of strength. Thus, the largest of the eight under notice scarcely exceeds 80 feet in diameter over all ; while the least, an oval one, is not more than 25 feet across, by a little over twice that length. Near this last there is no tumulus ; but in each of the other three cases on the north moors there is a houe closely adjacent, and all these houes have been found to contain an urn, one of them two.

There is, of course, as is evidenced by the usual designations, the theory that these enclosures may have served some purpose in the living economy of the personages whose remains were afterwards deposited in the adjacent tumuli ; but in the absence of any real data on which to found such theory, it has appeared to the writer more reasonable to seek some other explanation of their use and purpose. Had they been intended for an everyday object—for instance, a cattle-yard, or enclosing fence to a dwelling—it seemed that there must have been some evident place of entrance, which there is not in any of them ; besides which, any other shape would have served equally well with a symmetrical one, and been much more easy to follow out in the process of construction. While, then, the unbroken circular or oval vallum seemed to hint that, possibly, the enclosures had nothing to do with the common objects of daily life, the so-called "Druid-stone in the earthen ring, with its usual substratum of sand-stone, 42 feet in diameter,"* and the gaps which showed where other like monoliths had stood before their removal by the country road-maker, suggested that (at least in that case) the purpose might be sepulchral.

About two months since the writer had an opportunity of testing his theory as to this particular ring. Commencing a trench near the

* *Gentleman's Magazine*, May, 1861, p. 506 [*ante*, p. 209].

centre of the enclosed space, twenty minutes' work revealed the presence of much charcoal ; and, within an hour, an urn was discovered. While busily engaged in excavating round this, the writer found that he was in actual contact with a second. It was comparatively easy to remove the first ; but, with regard to the other, from its great size, the much greater depth at which it was placed, the hardening of a part of the circumjacent soil into the consistency of stone from the admixture of a portion of the calcined bones of the deposit, it was a work of time and toil and patience to effect its removal unbroken.

Both of these urns were placed mouth downwards,* and both contained charcoal and burnt bones, together with a considerable quantity of the moor soil and sand which had worked in from above and—at least, in the case of the larger one—forced a portion of the original deposit out. For, from having been placed with their upper portions within 18 inches of the surface, they had both become disintegrated above, and no trace whatever of the bottom of the large one could be found ; of the lesser, a small fragment only, but sufficient to determine its dimensions. The larger urn, which had almost certainly been the original interment, is $11\frac{3}{4}$ inches across the mouth. The rim is about $3\frac{1}{2}$ inches deep. The diameter at the lower edge of the rim (which projects $\frac{1}{8}$ inch from the body of the urn) is 14 inches. From the bottom of the rim to the point of greatest diameter is nearly 4 inches, and the total height of the urn cannot have been less than 18 to 20 inches. As it is, upwards of 16 inches from the mouth remains, and the outline is such as to show that the bottom must have been at least 3 inches lower.

The mouth is bevelled upwards, and then flanged inwards, so that a superficial glance would lead to the notion that the substance of the vessel there could not be less than $1\frac{1}{4}$ inches thick. The orifice is thus contracted to a trifle less than 9 inches. Both the bevelled edge and the flange are freely marked with uncial marks, arranged in two rings. The rim is marked with a series of short parallel impressions of a twisted thong, about ten in each panel, and alternately vertical and horizontal. Besides, round the line of greatest diameter is a ring of impressions about the size and shape of a small bean.

The other urn is of finer ware, much more elaborately ornamented, but sadly imperfect. It was set mouth downwards on a small flag or flat stone, and it would appear that all the rim had been removed previous to its being deposited ; for, in the first place, what is the

* It has been remarked that if an urn be found with its mouth downwards a second may always be looked for in the same tumulus. In four distinct instances on these moors the writer is able to verify the remark, three of which have occurred under his own hands within the last three months. This, if established as fact, would be interesting, and would probably open the question, Does the inverted urn betoken in all cases a secondary interment? or, Were the urns deposited at the same time, and do they betoken two separate interments?

actual mouth of the urn as it is, fits evenly on to the stone, as true as if ground so, which would not have been the case had the rim been forced off subsequently to deposit ; and secondly, the only portion of the rim recovered was obtained from the charcoal and sand enveloping the upper portions of the vessel, and had it been broken off by mere after-pressure from above, it would have been found at least in contact with the flag, if not with the vessel from which it had been broken.

The portion of rim seems to have been profusely ornamented, so much so as to give the idea of fretwork ; but it is impossible to make out either design or detail. The space between the rim and line of greatest diameter is decorated with a reticulated pattern, made with short carefully twisted thongs ; and this is guarded below by an encircling ring of chevrons similarly produced. This ornamentation is very carefully and beautifully done, and shows a wide contrast to the usual careless scratches found on this part of the urn. The whole form of the urn, too, was most graceful ; the total height having been a little over nine inches, the diameter of the mouth rather more than seven, and of the bottom not quite four.

Encouraged by the results attending the examination of this ring, the writer proceeded to investigate another, and considerably larger one, lying about half a mile more to the south. The dimensions of the last, over all, were from 40 to 42 feet, and the enclosing ring was probably 6 feet thick at the base, and not less than $3\frac{1}{2}$ to 4 in original height. Large flat stones, $5\frac{1}{2}$ to 6 feet high, by 3 or more wide, stood, one in each cardinal point, rather in the inner portion of the ring ; and the size of the constituent stones of the vallum seemed to diminish upwards. Of the ring now to be examined only a small portion was left ; but enough to make it more than probable that it, too, had been 6 feet in thickness at bottom, and formed of stone, the size of which lessened as the wall grew higher. The height of the vallum could scarcely have been less than 4 to 5 feet, and the outer edge of it seems to have been alike formed and guarded with large stones, set so as to show a flat external side of some extent. The diameter, over all, is fully 60 feet. Almost in the exact centre of this ring there was found an excavation of nearly 6 feet in diameter and about $4\frac{1}{2}$ in depth, carried down to, and partly quarried out of, the rock. This was filled with loose stones of no great size, but which unfortunately had been disturbed at some former period, and the deposit—for no doubt there had been one—had been removed, and the stones thrown back into the rifled cavity. Still the character of the ring was ascertained in this instance also. The other like enclosures on this moor remain for examination, which will be effected as soon as weather and opportunity permit.

The whole surface of the adjoining moor is studded with small houes, some of them not more than 12 or 15 feet in diameter, and

few exceeding 18 to 20, with a height of little more than 2 feet. All of them are formed of stones, contain very little earth in the interstices, and often cover a slightly rounded, low heap of the yellow surface sand of the moor. In a few of them some small fragments of charcoal are found, scattered up and down through a small thickness of the soil covered by the stones, but none of them contain any other trace of interment. There is also a singular scarcity of flint in any form on this part of the moor. The writer found, about a week since, after a series of very heavy rains, two or three pieces of wrought flint, which either had been "saws," or flaked off with a view to that purpose, and a small so-called "thumb-flint."

Among these very numerous small houes are the sites or the remains of several much larger cairns, the materials of which (in common with those of scores of the smaller ones, and of no less than three ancient walls of great size and thickness) have been taken away, in the course of ages, by the farmers in the dales below to mend their roads, make drains in their fields, and form the walls of their enclosures. Fragments of broken pottery and calcined bone having been found by the writer about more than one of these sites, there is no uncertainty about their original purpose.

There still remains one tumulus on the same ridge to be mentioned, which stimulates interest and curiosity almost as much as its examination baffles both. It is about 27 to 30 feet in diameter, and nowhere more than 2 feet high. The natural soil, below the peaty surface-soil of the moor, is a yellow sand, and there is no clay *in situ* within several hundred yards of the place. On cutting into the eastern edge of this hill, the writer's attention was instantly arrested by two very unusual circumstances : first, the entire substance of the houe was black, much of it being merely charcoal (in small fragments) and charred matter ; next there was the fact that the action of the fire had produced the effect of fusion on at least a part of the materials subjected to it. His idea at first was, from the density of the masses dug out and their general resemblance to the slag found in such vast quantities here (and forming the evidences of very ancient and exceedingly extensive iron-smelting), that he had lit upon the site of an excessively ancient iron-furnace. However, closer examination showed that the fusion in many cases was only partial, and that beneath the fused surface, clay, more or less burnt, was present. This clay is nearly white, very smooth and plastic, something resembling ordinary pipeclay, and appears to have been brought from the other side of the ridge (about half a mile) for some purpose ; and it seemed that, where it lay in contact with the surface sand, and was exposed to the strong heat of the fire, there fusion had taken place. But why it had been brought, to what purpose it had been applied, there was nothing whatever to show. In some instances masses of several

inches long and broad, and an inch thick, have been thoroughly melted. A few broken and scattered fragments of an earthen vessel were found about one part of the hill, which, from the general look of the pottery, the shape of the rim, and the dimensions generally, one would be much more inclined to pronounce Anglo-Saxon than Celtic. The ware is hard, dark-coloured, and well burnt, but must have been broken for ages ; and is so faulty in fabric that one could hardly help fancying it might have been rejected as worthless from the first. The writer almost hoped to find other broken fragments to warrant him in the notion that a "manufactory" had existed here; but there is no ground for that theory, so far.

Another large tumulus has been lately under examination by the writer, but almost without tangible result. It is not less than 80 feet in diameter, and about 6 feet high in the centre, and situate a few hundred yards south-east of Freeburgh Hill. A ring of stones, many of them of large dimensions, quite covered by the material of the houe, and not very regular in outline, runs round the central portion at a distance of 7 or 8 feet from the outer edge of the tumulus. Charcoal is interspersed throughout the mass, but not in large quantities anywhere. Opening a wide trench on the south flank, another was directed out of it through the assumed centre : a little to the east of this point a pile of loose stones was found, about 6 feet in diameter at the bottom and nearly 3 feet high. The whole pile was carefully capped with a convex layer or roof of wrought yellow clay ; and many of the constituent stones were blocks of basalt, derived, of course, from the "Dyke" which runs across the country about three miles south of the houe ; the entire pile was most carefully removed by, or under the eye of, the writer, but nothing whatever was found. Under them was a surface of bluish clay, about 3 inches thick, and under that 15 inches of strong yellow clay, which, in its turn, lay upon very hard, compact yellow sand, that presented not the slightest appearance of ever having been moved. The hill was then cut through to the south, and excavation carried on all round the centre, until a space of nearly 5 yards wide was completely examined, besides carrying another trench out to the west side. But nothing further rewarded our labours.

It should perhaps be added to the notice of the rings mentioned above, that not the slightest trace of any mound or pile exists in any of them.

[1863, *Part I.*, pp. 708-713.]

Since the date of the writer's last communication, four entirely fresh houes have been examined by him, besides further investigations in two or three others, which still seemed to afford scope for inquiry. The results may be described as follows :—in two, constructed on coincident principles, all tokens of sepulchral deposit

were wanting; in three, fragments only of the urn originally containing the deposit, in conjunction with portions of the calcined bones and accompanying charcoal, were obtained; in a sixth, undisturbed but most inadequate evidences of interment were met with.

In the case last specified, the tumulus was of a very slightly obtrusive nature. It was so low as to require a little exercise of faith as to its being a grave-hill at all, and except when the sun was waxing low in the heavens, and the longer shadows aided the eye, it might easily be passed by without distinct notice. The circumstance, however, that it lay near another low, not very conspicuous tumulus, from which the writer had taken an urn not many months before, induced him to resolve on ascertaining its character. Its dimensions were about 45 feet in diameter, by 1½ in greatest height. On removing a portion of the black or surface soil, which was of more than average thickness, a surface of sand was exposed which presented no appearance of any former disturbance, and seemed at once to negative the idea that the apparent tumulus was really artificial. A second commencement was then made near the centre, about which a few small stones were met with, scarcely covered by the surface soil. On removing these, the same yellow sand as that below the black earth of the circumjacent moor was found, and it was only the fact that a stone of some apparent dimensions resisted the spade at about 18 to 20 inches deep that gave any encouragement to further search. However, on laying bare the stone in question, which was about 2 feet by 1½ in superficial measurement, some fragments of charcoal were seen upon its upper surface, while below it, more charcoal, as well as other traces of a considerable fire, presented themselves. Returning to the point at which the first opening had been made, a tolerably wide cutting was directed so as to pass through the centre and to lay bare an area of several feet in the neighbourhood of the aforesaid large stone. At the distance of about 7 or 8 feet from the centre, a barrier of stone-work was cut through, and in the process of removing this it seemed to become more than probable that there had been two fires upon the spot; one at a lower level, which had then been covered with a layer of sand some inches thick, on which in its turn the second fire had then been lighted. On the level of the lower fire, and at a distance of 3 to 4 feet east of the large stone, an irregularly circular excavation, about 19 inches by 17, was observed, quite filled up with charcoal and dark-coloured soil, with a few fragments of calcined bone intermingled. From the lighter nature of the contents of the hole a dull echo was given when the tool or a clod of earth fell upon the dark surface; which led to the confident expectation that there was an urn below, but nearly or entirely empty. But the expectation was not to be realized: only two or three fragments, which might have been burnt clay, were discovered in clearing

the hole carefully out. Much labour was spent in turning over other parts of the hill, and in following down traces of charcoal and "forced" earth which showed themselves in various places and reached to a depth of 4 or 5 feet from the surface, but all to no purpose : no further discovery was made.

The excavation which contained the charcoal and bones was made in a pocket, or small bed, of light yellow clay which intruded amid the staple sand at that part of the bottom of the hill ; and it would seem that this had cracked under the influence of the heat of the fires, and that into the cracks thus formed there had infiltrated intermingled ashes and charcoal ; as also had been the case in several long, nearly vertical holes, of an inch in diameter, or thereabouts. And this, until repeated experiments had been made, and the means by which the charcoal, etc., had reached the places in which it was detected had been made out, led to repeated disappointments.

There seemed little reason to doubt that the sand had been removed from the basal area of this hill previous to the construction of the funeral pile, which must have been made at least a foot below the surrounding surface ; and the second fire in proportion ; and that then the sand and soil so removed, with very little addition from other sources, had been returned to form this unobtrusive grave-mound. Still the apparent absence of any principal deposit is very perplexing.

Both of those houses in which all traces of deposit were wanting, and which seem to be constructed on coincident principles, were of large size, though one was much larger than the other : the smaller being about 45 to 50 feet over all, by 3½ high ; the larger 65 feet through by fully 6 or 6½ high. In both there was a *quasi* wall of stone, concentric with the outline of the hill, but so far within the outer limit as to be quite covered over by the material of the house. In both, again, this wall, which in places consisted of large stones set up edgewise, and elsewhere was formed much as an ordinary "dry stone wall" is, did not fully encircle the centre, but guarded only* the southern and western sides, appearing to cover an arc of somewhat more than 180°. In both, moreover, there was a central conical pile of stones, or "cairn," of about 6 feet in diameter at the base, and rising to a height of nearly or quite 3 feet. In both of them there were traces of charcoal interspersed, but nowhere in any quantity, through the substance of the hill. But in neither of them was there any evidence of a fire made upon the spot : there was no bottom layer of ashes or calcined sand, nor any discoloration of stones and earth such as to point back to their subjection to great heat, neither was there in either of them the slightest trace of a deposit, whether of calcined bones or the entire body of a departed Celt.

It seems impossible to suppose that such structures were raised as

* The same remark holds good of the "barrier of stone" mentioned in the preceding description of the low house, p. 708 [*ante*, p. 222].

cenotaphs, and much less for no purpose at all. There is no analogy to lead to the adoption of the idea that their purpose was other than sepulchral, and the only rational hypothesis that is left seems to be that they are each the site of an extremely ancient burial of an unburnt body, which, deposited beneath the loose stones of the cairn, and without any approach to such protection as is afforded by any species whatever of cist, has decayed entirely through the lapse of time and left no trace at all behind. This supposition is, possibly, also strengthened by the total absence of pottery and flints in both the hills in question.

In the grave-hill mentioned in a former paper, as affording a deposit of calcined bones on the natural surface, unprotected by urn or cist,* further research has led to the discovery of the fragments of a large and massive urn, and part of its contents, charcoal and calcined human bones. These were met with at a depth of a few inches from the surface on the eastern side of the houe, and had evidently been placed there at a very remote period, after their removal from the central part of the tumulus. It will be remembered that it was stated that the butt of an oak sapling was found let into the centre of the houe. There seems no reason to doubt that in sinking the hole to admit this post (or "stoup," or "stang," in the language of the district) the urn had been dug upon and virtually destroyed, but that such portions as could be removed tolerably entire were, together with a considerable portion of the contents of the urn, re-interred where the writer found them. Re-interred; for they were all lying together, and were placed below the surface-soil. Who will undertake to say that they were not disturbed, and thus re-interred by one to whom urn-burial† was not yet a thing of the past?

The grave-hill which has next to be noticed presented several points of peculiar interest. It was very symmetrical in form, of considerable size, probably more than 60 feet in diameter and 6 feet high; had a very considerable quantity of simple flint fragments strewed over it at the depth of 5 or 6 inches from the surface—a peculiarity

* *Gentleman's Magazine*, Jan., 1863, p. 24 [ante, p. 215].

† It is well known that the ancient Scandinavian intending settlers, among other modes of taking possession of their claim, adopted the plan of setting up a pole, or stang. Thus, in *Landnamabok*, a worthy who had been "prospecting" in Iceland, and had taken up his lot, is spoken of thus: *Thur setti hann nidur staung hafí*, "There he erected a stang." Now there are in this district several localities whose names have the word "stang" as a prefix, e.g., Stang-end, near Danby Dale-end; Stang-houe, near Skelton; Stang-houe in Newton-Mulgrave, etc. There is scarcely ground for doubting that all these names are due to the erection of a "stang," or post, marking a boundary, or denoting possession; and, from the position of the hill mentioned in the text, taken in connection with the boundaries which have continued to exist since the date of the Conquest, while it is scarcely probable that the stoup on it could have served any other purpose than that of a boundary mark, it is certain that as a boundary mark it must have been such antecedently to the Conqueror's grant of the land it stands on.

hitherto observed by the writer in but one other instance in this district ; and lastly, contained a perfectly defined central cist. There was reason to believe, from the merest inspection, that the hill had been tampered with some considerable length of time ago ; but the area of operation had been so small, and there were so few external traces of considerable disturbance, that it was hoped no great mischief had been done.

The work was commenced by opening a cutting from the north side of 10 or 12 feet in width, and directing it through the centre of the hill. Much charcoal was almost immediately exposed to view, spread through the substance of the hill. It soon appeared, besides that the basal part of the hill, to within a few feet of its outer edge, consisted of a platform of stones (many of them $1\frac{1}{2}$ or 2 feet square), and which maintained a general height of nearly 2 feet. Over this platform a layer of whitish sand of several inches in thickness was deposited, and over this the general soil of the mound. Nothing more of interest was observed until the centre was reached, when a large flat stone of not less than $4\frac{1}{2}$ feet by 2 or $2\frac{1}{2}$, standing vertically, was uncovered.

Excavation being continued on the south side of this slab, the existence of a central cist was disclosed ; but also the fact that it had been penetrated to before, and the western end destroyed ; and that, in fact, the large vertical stone had no doubt been originally the cover or cap-stone of the cist. The writer was prepared for this result by the previous discovery of a few broken and scattered fragments of an urn, found among the substance of two or three of the surface-sods which had been removed from a little on one side of what had been once the apex of the houe. Proceeding to lay the cist quite open, other remains of the urn, together with much charcoal and intermingled charred bone, were taken up, and the shape and construction of the grave-chamber made evident. It had been as nearly $4\frac{1}{2}$ feet long as it was possible to estimate, and something over $2\frac{1}{2}$ feet wide. Each side had been formed of two flat stones, or rude flags, set edgewise, and of such size as to have an inner height of about 21 inches ; while the two ends had each been formed by two other flags set so as to converge to an angle or apex at each end. It lay almost accurately east and west, and the eastern end remained in its exact original form. The whole floor of the cist was formed of compact yellow clay, apparently wrought into its place by a kind of puddling process.

The writer, in addition to his personal acquaintance with the interior of a considerable number of the Cleveland houes, possesses information with respect to a great number of others opened by different explorers within the last few years, and is only aware of two decided cases of central cists exclusive of this one, and one other at least probable one, which has come under his own eye. It may be

safely said that nineteen out of twenty of the houes here have not only no cist, but no attempt at anything like one. There is one very perfect specimen on the Newton Mulgrave Moor, in which the cap-stone is still *in situ*, entrance having been effected through the side. Either from this or from another and much larger houe near it (the writer has not been able to ascertain which), a bronze dagger was taken, together with some flint arrow-heads and other articles, some five or six years since. The other instance was in the case of a tumulus opened on Bernaldby Moor, near Guisborough, in the year 1843, a record of which is given in Ord's "History of Cleveland," pp. 106, 107.

The fragments of the urn which were recovered—some from the inside of the cist and some from the surface-sods at two or three different points—were sufficient to give an idea of its probable shape, size, and ornamentation. The rim was at least $3\frac{3}{4}$ inches in breadth, with encircling single impressions of a twisted thong near both its upper and lower edges. Besides, there were two (or more) similar impressions round it near its middle point; while both above and below these middle lines, chevron-formed impressions produced in like manner, and arranged point to point, filled up the rest of the space.

From below the rim to the line of greatest diameter, diagonal rows of marks placed in pairs, and not very close together, formed the ornamentation. Probably the mouth of the urn—the edge or top of which was also impressed with rudely made marks—was of some 10 or 11 inches diameter, and the whole urn not less than 15 or 16 in height.

No doubt the destruction in this and so many similar instances—where the urn is found broken up and carelessly scattered about in different parts of its original shrine—is due to the proceedings of former treasure-seekers.

The idea that these houes do contain gold is yet very prevalent. The writer has been told by a person, whose general information might have seemed sufficient to obviate such a notion, that a man, who opened many of these houes without authority a few years ago, did find treasure in them. He has been asked in mid-labour by passers-by if he were "lating (seeking) goud;" and on applying for permission to open one of those referred to above (situate on a part of the moor which had become private property), he received it on condition of surrendering whatever gold he might find to the owner.

Diggings on the Skelton and Guisborough Moors.

[1863, Part II., pp. 125-129.]

On Tuesday, May 26, 1863, the writer, with a party of four men, commenced the investigation of a large grave-hill situate on a part of

the Skelton Moors. The hill was $5\frac{1}{2}$ feet in diameter, and rather more than 6 feet high in the centre. Like almost every other houe of any considerable dimensions in the district, it bore evident traces of former opening at the centre. Unlike them, however, in another respect; for the removal of a spade-depth of earth from the higher parts of the hill did not bring to light any fragments of ancient pottery, or of calcined human bones and charcoal. Commencing from the south with a wide trench, expanding as we neared the middle parts, a large urn was discovered at a distance of 9 feet due east from the centre, and not more than 18 inches from the surface. The only protection from above was a flag-stone of small dimensions—perhaps 12 inches by 15—which the writer himself removed in marking out the work for the men. The urn was quite full of human bones, which, a little below the topmost strata, were beautifully clean and dry, and many of them retaining a fair blue tint arising from the heat to which they had been subjected. Among them were found two portions of a large bone pin, which, when entire, must have been at least 6 inches long; probably more.

The urn was 17 inches high, and of about $13\frac{1}{2}$ inches in greatest diameter, the width across the mouth being very nearly the same as the measure through the uppermost rib. For it was without the heavy overhanging rim which has characterized all the others, save one, found by the writer in these grave-hills; and, instead, is encircled by two ribs, or projecting mouldings, the uppermost being $5\frac{1}{2}$ inches below the mouth, and the second 4 inches from the higher one. The diameter of the bottom is $5\frac{1}{8}$ inches. The substance of the urn is not very thick, and it seems fairly baked.

Like a former one of somewhat similar shape, it is entirely without external ornamentation; the only appearance of that kind being just inside the mouth, where a line of impressions, much like what might be produced by pressing a finger upon the soft clay, is traceable.

Pursuing our investigations, we found the centre of the hill had been dug out to a point a little below the level of the surrounding moor-surface. Pushing our researches beyond the parts thus disturbed, we came upon very observable quantities of charcoal at a point about 5 feet north-west of the centre, which speedily led us to what were, unhappily, only the crushed remains of a second urn of singular beauty. The clay of which it had been made was much redder than in these cinerary urns usually, but in such a state of disintegration that it was difficult to obtain a single fragment of 2 inches square, and even that required to be handled with the greatest care for fear it should fall to pieces under the touch. Enough, however, was obtained to give a pretty close approximation to its original size and shape, and to disclose the entire ornamentation. The diameter of the mouth was probably about 7 inches, and the height $7\frac{1}{2}$ to 8 inches.

The depth of the rim was $1\frac{3}{4}$ inches, and the diameter of the bottom about 4 inches.

The rim had two linear impressions of a twisted cord or thong on its upper edge round the mouth. It was then divided into upper and lower halves by a similar impression round its middle. Two others of the same description at both the lower and upper edges left a space of about $\frac{3}{4}$ of an inch wide on either side of the middle ring, to receive a series of rectilinear diagonal impressions (produced by like means) meeting on the middle line so that each pair formed a chevron. The middle rib, which seems to have been rather more than $1\frac{3}{4}$ inches from the lower edge of the rim, was marked by two encompassing impressions just like those on the rim, and above these were nearly vertical rows of impressions not very dissimilar in shape and size to those which would be made by pressing a small apple-pip into soft clay, except that there was a little more curvature about the small end.

Another noticeable character of the clay of this urn was that it was burnt red throughout. There was no black portion in the middle, as is the almost invariable rule in these Celtic urns.

The excavation of this hill was carried on to within a few feet of the northern edge, but no further discoveries were made.

Originally this hill had been encircled by a consecutive series of retaining-stones—a character which holds good of an adjoining tumulus of still greater size, of another about three-quarters of a mile north of it, and of a third lying about a mile north-west. An imperfect barrier of stone-work was also met with about 6 or 8 feet from the exterior ring, and there had been a good many stones used in building the central part, but there were no traces of any cist.

On the following day the scene of our labours was removed to one of the hills which lie a long mile to the north-west of that just described. A boundary stoup on the summit of this rather interfered with the operations of the workmen. However, a trench of 6 feet wide, cutting the hill through from north to south, in such wise as to leave two-thirds of the whole untouched towards the east, soon revealed a solid flooring of rock which did not seem ever to have been disturbed; working still closer to the centre, the writer then directed an excavation of some 6 feet wide to be made, so as to encompass the central stone or stoup, and a sustaining pillar of earth about 5 feet in diameter. Before this had been carried on to any depth, tokens of the close vicinity of four separate sepulchral deposits were observed; one of these lay about 4 feet south-east from the centre, and another 1 foot east of the last. From the latter the writer took a very beautiful vessel of the so-called "incense-cup" class, $1\frac{7}{8}$ inches high, $2\frac{7}{8}$ inches greatest diameter, and $1\frac{7}{8}$ inches across the mouth. In it lay a portion of a curved bone pin, two other fragments of which were after-

wards obtained from the bones beneath ; while, immediately below it, and upon the deposit of burnt bones, lay a remarkably fine arrow-head of white flint.

From the other deposit there was obtained a flint knife, unburnt and in good preservation ; and an unshaped fragment of flint which had passed through the fire. The other two deposits, which lay more to the east and north-east of the centre, yielded nothing but charcoal and bone. The semicircular excavation was continued and carried through into the original cutting without further disclosure. But meanwhile one division of the workmen had completed the first trench, and laid bare a flagstone, or flat mass of rock, $5\frac{1}{2}$ feet long by 4 wide, and 12 inches thick, which covered a portion of the floor to the north-west of the centre. From beneath this was obtained a small urn, about 6 inches high by $6\frac{1}{2}$ inches in greatest diameter, of the so-called "flower-pot" description. It is of coarse ware, and the sides of great thickness. The edge of the mouth, which descends with a hollow slope to a kind of flange about half an inch below, is rudely marked with two impressions of a twisted thong, encompassing the whole mouth. The other ornamentation is of a similarly rude character, consisting of three horizontal rows of not very regularly disposed vertical impressions, of about two twists of the thong each. These occupy the space between the edge of the opening and the rib, a space of $1\frac{7}{8}$ inches, while just below the rib are two other and similar rows. The bottom of the urn is a trifle over 3 inches in diameter. Like an urn of similar coarse ware and careless ornamentation, mentioned by the writer in a former communication,* this also was quite empty, there not being a trace of bone anywhere near it.

The incense-cup has the two customary perforations (which were clearly made previous to the firing process) about half an inch apart, and on a level with the bottom. The ornamentation consists of two encircling rows of circular dots round the mouth, very close to each other, and not remarkably evenly drawn. A third similar row encompasses the vessel a little above mid-height, approaching the lower of the above-named rows much more nearly on one side than the other ; and a fourth about a quarter of an inch above the bottom. Between the second and third of these rows, as also between the third and fourth, a series of straight lines of round dots are drawn so as to make a continuous zigzag, the angles of which abut upon the rows. The bottom also is decorated with a series of similar straight lines of different lengths, and meeting each other at various angles : it being quite impossible to give any mere verbal description of the design or effect of the whole.

Again, on Tuesday, June 9, the writer was at liberty to engage in these investigations, and attention was directed to the grave-hill which

* *Gentleman's Magazine*, Jan., 1863, p. 26 [*ante*, p. 216].

lies about 70 or 80 yards to the north of that from which the urn and incense-cup, with the flint arrow-head, etc., just mentioned, were obtained. This tumulus is of still larger dimensions than the former, the diameter being not less than 57 feet, and the height above the level of the moor being fully 6 feet still, notwithstanding the removal, some long time since, of a great deal of stone from its central parts. It is also (as was noticed above) surrounded by a circle of large retaining stones, set edge to edge, with flat surfaces outwards. In this case it seemed advisable to begin proceedings by opening a trench near the western margin, ranging from north to south, gradually widening as we approached the centre, so as to examine every part of the hill thoroughly, down to the level of the ground.

It was soon ascertained that this tumulus also was piled over a *quasi cyclopean* pavement of ponderous flat-surfaced rock masses, which probably lay there long ages before the friends of the deceased Celt, to whose memory it was raised, fixed upon the place as a suitable site for his interment. Here and there it would seem that they had inserted wedge-like stones to fill up chasms; but, as far as it could be ascertained without resort to actual quarrying operations, no deposit, similar to that in the hill last examined, had been made. On approaching the centre there was, as had been foreseen, every token of destructive disturbance, the soil being very loose and friable, and entirely intermingled, instead of lying, so to speak, in the usual semi-stratified form. However, on reaching the eastern side of the centre, enough of the original internal stonework was left *in situ* to give some sort of an idea of what probably had been the inner protection of the original deposit; for a segment of a circle of flat stones inclining upwards and inwards was still left, the outer ones overlapping the inner ones, like the sods over a field-heap of newly gathered potatoes.

All hope of a central deposit being now dissipated, a systematic search for secondary deposits on the eastern side was commenced, and half an hour's labour disclosed the surface of a flat stone, of about 20 or 22 inches square, lying about 8 or 9 inches below the ling, and nearly 7 feet, a little northward of east, from the centre of the hill. On removing this a cavity was at once observed beneath it, and a few moments of careful work disclosed the presence of an urn. It proved to be of very considerable dimensions and was taken out entire, except a very small fracture on one part of the edge, and with scarcely any other flaw in any part of it. It is, without exception, the most perfect of any the writer has ever seen at all approaching the same dimensions. It stands very nearly 17 inches high, and is 13 inches over all across the mouth. The overhanging rim or border is $4\frac{1}{2}$ inches deep, and is marked with an encompassing impression produced in the usual way, and with a series of shorter

or longer straight marks of the same kind, arranged—so far as one can say any design is apparent—so as to make triangular spaces, impressed as described, of the whole width of the border, alternate with similar spaces left without mark. There is no perceptible rib, but three inches below the lower edge of the border where the sides begin to slope away towards the bottom, a line of small marks about an inch apart runs round the entire vessel. The bottom is about 4 inches in diameter, and the whole urn remarkably symmetrical and well shaped. The edge of the rim round the mouth, which is bevelled inwards, also has continuous encircling impressions of the twisted thong.

When found, this urn was nearly full of mixed clay and moor-sand and black earth above, and the lower half with burnt bones, many of which were in much larger and less completely burnt fragments than is usual. Besides, there was, adhering to that side of the urn which was turned towards the centre of the hill, and level with its margin, an “incense-cup” placed on its side, and with its mouth opening towards the interior of the urn. It had clearly been placed in this position at first, and secured in it by means of soft clay. This cup is about 2 inches high, by $2\frac{3}{4}$ in greatest diameter, and $2\frac{1}{2}$ across the mouth. It is most imperfectly baked; indeed, one-half of it is still plastic clay, showing no trace whatever of the action of fire. The other half is of red ware, but very soft and friable. The ornamentation consists of two encircling impressions, very near each other, just round or below the mouth, from the lower of which a series of parallel straight impressions somewhat deviating from the perpendicular reach nearly to the bottom of the cup, which is scarcely 2 inches in diameter. No trace of flint or wrought bone (and only the merest tokens of the presence of charcoal) was obtained in either of the urns, or near them. The smaller one was partly filled with moory sand, and some tenacious black substance adhering firmly to its sides; while beneath it, though some inches lower, a considerable quantity of very finely comminuted burnt bone occurred in close contact with the side of the containing vessel.

Investigation of a Large Celtic Grave-Hill in Cleveland.

[1863, Part II., pp. 269-274.]

The barrow-digging operations, next in sequence to those described in a preceding page,* were carried out in connection with the larger of the two houes on the Skelton Moor, commonly known as Black-howes; and from the lesser (or more northerly) of which a large urn and the fragments of a smaller one had been obtained about three weeks before.† The tumulus now under examination was one of very considerable magnitude, being 62 feet in diameter, and at least

* *Gentleman's Magazine*, August, 1863, p. 125 [ante, p. 227]. † *Ibid.*

8 in height at the centre. Probably at some former time it had been even higher, as the most cursory observation sufficed to show that it had been opened from above in the middle, the consequence of which had been a large central depression or basin. This hill also was girt in with retaining-stones of no small size, set with their flattest sides outwards, and most of them still maintaining their original places and adjustment.

The work was commenced by sinking a trench of 7 or 8 feet wide round the southern flank of the tumulus, at a mean distance of about 8 feet from the outer edge. At a point almost exactly south of the centre, and about 20 feet distant from it, the upper stones of a considerable pile were come upon at 12 or 15 inches below the surface. It was soon ascertained that a series of flat stones of large size were laid slopingly round this pile, and on removing some of these the appearance of hollow spaces within led one to expect speedily to meet with a deposit. A large flake of burnt flint, followed by a second, and the discovery of burnt bone, soon converted expectation into certainty; and half an hour more disclosed the site of the main deposit, and near it, at a point exactly 21 feet due south from the centre, a small "incense-cup" of very red ware, placed mouth downwards. It is without the frequently occurring perforations in the side, and equally devoid of ornamentation. It was nearly full of peaty soil, with a layer of some black substance adhering pretty firmly to the interior all round. It was set on a small flag-stone, and protected above by another of larger size.

There were still many stones of the pile to be removed, several of them below the site of the small urn just discovered. At a level lower by at least one foot, numerous fragments of another red urn, accompanied by portions of calcined bone which had assumed a clay colour and were much decomposed as well as scattered about, were met with, and under such circumstances that there could be no reasonable doubt that they belonged to a deposit anterior in point of date to that found just before, and disturbed in the process of excavating the bed of the cairn enclosing that. The urn was completely disintegrated, and its *débris* found in various different parts of an area of 15 or 18 inches square.

Leaving this deposit as hopeless, the writer next began to excavate more to the south, but still within the limits of the base of the cairn. Here a third deposit, 2 feet distant from the place occupied by the incense-cup, and accompanied by a third urn of red clay, also very much broken, was laid bare. This urn, on careful restoration, proves to have been of comparatively small size, but still much too large to rank as an ordinary "incense-cup." It is $4\frac{1}{2}$ inches high, by nearly 4 in diameter across the mouth, and of a very elegant form. The only ornamentation consists of short vertical impressions of the twisted thong on the upper part of the sides round the mouth. In the earth

and clay closely surrounding the compressed fragments of the urn the writer discovered three jet beads, two of the "billet" shape, and the third somewhat similarly formed, but much more slender. The inference that this urn (which contained a small quantity of burnt bone) accompanied the ashes of a female, and that this female was very closely connected with the man whose bones were in association with the incense-cup and burnt flint fragments, seems inevitable.

While the writer was busily occupied with careful attempts to remove the remains of this urn with as little additional injury as possible, he was called to inspect a discovery made by one of the workmen at a place about 4 feet to the west of where he was at work. This proved to be the flattened remains of an urn of very large dimensions and of the ordinary shape and ware. It seems impossible to give any safe estimate of the size or height of the vessel when entire, but some idea may be formed of what it must have been, from the circumstance that though no small portion had been removed by the spade before the man's attention was drawn to the fact that he was cutting on to pottery, still the *débris* of the urn as finally removed, all *in situ* as laid bare by careful and patient manipulation, covered an area of nearly 2 feet long by 15 or 16 inches in breadth. Judging by three which the writer has, of 16 $\frac{1}{2}$, 17, and 17 $\frac{1}{4}$ inches in height severally, the vessel now under notice could not have been much, if at all, under 22 to 24 inches high, and, very probably, even more. It did not seem to have contained, in comparison with its size, any very great quantity of burnt bones, as none had escaped, and the quantity still enclosed in their crushed receptacle seemed scarcely sufficient to have filled an urn one-fourth of the size. Probably this comparative emptiness may account for such complete destruction of the vessel itself.

Continuing the examination of the tumulus by a trench carried round its south-west portion to the level of the soil, a layer of charcoal was met with of at least an inch thick; and this, being followed up, was found to be covered with piled stonework, which at a point nearly due west of the centre threw off a conical cairn, the outer limit of which reached to within 3 or 4 feet of the external retaining stones. About two yards more to the north another such pile turned more towards the centre, but no deposit of bone or pottery was met with in either place.

It was otherwise, however, with an excavation which was going on nearer the centre preparatory to taking another trench of about 6 feet wide, across from east to west and down to the level of the moor, alongside of that which had already been taken out. For at a point precisely south-west of the centre, and about 11 to 12 feet distant from it, two flagstones, the one overlying the other, were met with, and the lowest (about 4 feet from the surface) was found to cover a space nearly 2 feet in diameter, which had been rudely walled in,

to form the receptacle of a sepulchral deposit. Either the natural subsidence of the materials of the tumulus, or the disturbance resulting from the central opening above referred to, had led to the displacement of the stones forming this well-like enclosure, and in consequence the urn was very much broken and the sides very much decayed. The rim, however, remained in some four or five large pieces, and parts of the vessel below the rim as far as the bulge or point of greatest diameter. The chief part of the bottom also, with enough of the sides still unbroken to enable one to determine the size and shape of the entire urn, was obtained. It is of fine and very thin ware, and most delicately decorated with remarkably fine impressions of the twisted thong—as fine as if made with twisted netting silk—three encircling impressions above and three below (besides as many inside the lip), while the intermediate space is filled with quasi-panels of seven or eight like impressions alternately vertical and horizontal. Below the rim the markings were encircling lines or rows of circular impressions about the eighth of an inch in diameter.

As regards the form of this urn, it was quite unlike all the others found in these Cleveland tumuli, except one. It was $7\frac{1}{2}$ inches in diameter over all at the mouth; not less than 9 at the bottom of the rim, which was about $3\frac{1}{2}$ inches deep; and the vessel continued to widen for more than $2\frac{1}{2}$ inches lower, after which its sides fell in rapidly towards the bottom, so as to present for the lower half of the whole a kind of punch-bowl shape. The whole height when entire could not have exceeded 9 inches, even if it reached so much.

The next part of the excavatory process depended on the deepening of the trench across the hill from east to west, and widening it so as to cut through the southernmost rim of the central basin, and in extending the exterior trench round the eastern flank of the hill. During the execution of the former part of this work a deposit of calcined bone, quite unprotected by any immediately contiguous stones, and unaccompanied by either pottery or flint, was disclosed at a point about 10 to 11 feet south of the centre, and about $4\frac{1}{2}$ feet deep. This deposit, however, though urnless and without any other immediate means of isolation from the surrounding soil, lay only a few inches beneath a considerable pile of stones, which reached from only a little beneath the surface, but assumed no very definite form.

The extension of the trench on the eastern side of the barrow disclosed the same careful flagging or paving as had been found overlying the surface of the soil at all other parts of the hill in this quarter, and which extended quite to and beyond the centre towards the west; but nothing else. The writer, therefore, proceeded to work out another trench, 5 or 6 feet wide from south to north, and lying between that last-named and the centre. This had not been carried deeper than 18 or 20 inches before a flat stone of noticeable dimensions was laid bare, which, on its removal, disclosed a second

and some smaller fragments. When these had been, after some labour, put aside, a third flag, triangular in form and not less than 2 feet in length, was discovered, and beneath it a deposit of incinerated bones, but nothing enclosing or accompanying them. Below the deposit lay a small pile of stones, all of small size, but still with the interstices quite hollow. These, with the few inches of soil which lay between them and the moor surface, were carefully removed, but nothing further was found. This deposit lay about 14 feet from the centre in a direction nearly south-east, and about $3\frac{1}{2}$ feet deep.

The flagging at the base of the tumulus, and not more than 5 feet south of the centre, had by this time been reached by other labourers, and was found to be double, and, in a sense, cellular: but while the writer was directing its examination he was summoned to extricate a mass of pottery and human ashes from an inserted bed of sand, which lay north of the deposit last found, and nearly due east from the centre. On investigating the composition of this discovery it was found to contain two urns, one of which was entirely crushed, but the other only a little disintegrated about the mouth. There were a few small stones in contact with these urns on different sides, but none of them 6 inches square, while above them, but separated by a considerable depth of sand, there had been placed a flat stone of 12 or 15 inches square. The position this deposit occupied in the hill was distant from the centre about 16 feet, and about 4 feet from the surface.

The lesser of these two urns is about $4\frac{1}{2}$ inches high by $3\frac{3}{4}$ inches diameter, and the marking consists of a series of three linear impressions of the twisted thong, slightly radiating from points at the bottom of the sides as far as up to the rib, which is about $1\frac{1}{8}$ inches below the verge. The other urn appears to have been about $5\frac{1}{2}$ inches diameter and 7 to $7\frac{1}{2}$ in height, with an overhanging rim of the usual description marked with a large reticulated pattern formed in the usual manner.*

The next part of the operations depended upon the driving of a trench, 10 to 12 feet wide, from the excavations already made on the south side right through the centre. On approaching within 6 feet of that point, the writer cut upon a large flat stone about 4 feet deep, and 8 feet south-south-west from it, on removing which an urn, mouth upwards and nearly empty, was immediately apparent. While occupied in the endeavour to extricate this, the side of a second was slightly fractured, and in working round this with great care a third was detected. All three were placed with their mouths upwards, and a few minutes' labour sufficed not only to show that both the last-named were so called "incense-cups," but to remove them safely from

* The characteristics of this find were such as at once to suggest the same inference as that just now stated, namely, that the lesser urn accompanied the remains of the female.

their resting-place. Both of them are of red ware, and the larger of the two is $2\frac{1}{2}$ inches high, by 3 across the mouth, and 4 in greatest diameter. This is elaborately ornamented with encompassing impressions of the twisted thong, two close together near the bottom, one near the edge of the orifice, and three besides, about equidistant, dividing the sides of the cup into four spaces, each about half an inch wide, which are further decorated by a series of chevrons with their angles on the lines. The smaller of the two is also marked, but less carefully and prettily than the last. The third urn is of an ordinary bowl shape with rounded sides, of thin ware, red in colour, and probably of the "drinking-cup" description. It is unfortunately very much crushed by the pressure of the superincumbent stone, though admitting of restoration, and is of a remarkably elegant form. This vessel was quite empty, except a little charcoal at the bottom,* and only a very few and very small particles of calcined bone were found in company with the entire group. The two incense-cups were quite full of sand and charcoal, with scarcely a particle of bone, and the larger of them was carefully closed with a mass of charcoal of $2\frac{1}{2}$ to 3 inches square. On prosecuting the trench nearer to and through the centre, the flagging already adverted to was found to be continued as far as the researches extended, and to consist of larger stones the nearer the centre was approached. It was found that one of them had been removed in the former (central) examination of the tumulus, but no tokens presented themselves in any quarter that discovery had been made of the central interment. Neither was it found in the present exploration, although a most careful and systematic search was carried on over a space of not less than 5 feet radius from the middle of the hill. Time failed, or a wider space still would have been examined; and, as it is, the writer purposes returning at an early day to continue the investigation, and complete the thorough search of the hill.

But even as it is, the barrow is a most interesting one, and certainly wonderfully illustrative of the custom of burying continuously in a tumulus already formed. No less than nine interments, clearly, and ten urns have been discovered; besides which, the distinct chronological connection of three of them is clearly illustrated. Beyond dispute, the tumulus was raised on the tomb of some great chief. Then, one cannot even guess how long after, a secondary deposit was made on the southern flank. Then, again, and doubtless after many years, a third interment was made on the very site of that last mentioned, and causing the entire demolition of its accompanying urn and dispersion of the ashes; while the accompanying fragiments of calcined flint prove that even this third interment dates back to the "indefinitely remote stone period."

* Except, also, one single calcined tooth.

Further Researches in Cleveland Grave-Hills.

[1863, *Part II.*, pp. 548-552.]

The diggings now to be noticed were carried out in a tumulus situate about a mile nearly due north of that from which were taken the nine cinerary vases already mentioned. This grave-hill was about 42 feet in diameter, and encompassed at its base by a circle of large retaining stones, as previously described in these papers. It was evident on the slightest inspection that the hill had been subjected to extensive disturbance about the centre, and especially on the eastern side of the centre. Part of this might be due to the proceedings of the Ordnance surveyors, who made this hill one of their stations ; but there could be little doubt that other hands beside theirs had been at work, and with a definite object as well—the same object which has led to the central demolition of every considerable hill in the district.

The writer marked out the work for his labourers by laying bare a space about 15 feet long and 6 wide, and concentric with the outline of the barrow ; the outer edge of which was approached within 4 to 5 feet by this cutting. While occupied with this preliminary work, a flat stone of 15 inches square, lying horizontally at a distance of $13\frac{1}{2}$ feet, almost exactly due south from the centre, attracted attention. On removing it the mouth of an urn was, after a few minutes of very careful search, disclosed ; and about an hour of cautious labour was sufficient to extricate it, with no damage beyond that inflicted by time, the pressure of the overlying soil, and the roots of the ling. It proved to be of very great thickness, and of extraordinary tenacity or toughness. In shape it varies from the generality of the Celtic urns previously discovered by the writer, inasmuch as from the bulge or line of greatest diameter the sides slope away almost abruptly to the bottom, with a straight outline instead of a more or less curvilinear one. The diameter of the mouth is $10\frac{1}{2}$ inches, depth of rim 3, from rim to bulge $2\frac{1}{2}$, the total height of the vessel being 11 inches. It was found to contain two portions, some 3 inches long each, of bone pin, the point of one being quite perfect and of extraordinary finish and sharpness.

The whole centre of the hill was one mass of hopeless confusion ; very large flat slabs of stone lying in all directions, as they had been dislodged by previous explorers. Several pieces of wrought flint, however, were found ; two of them being arrow-points, one perfect, the other with the point gone. On the eastern side a few broken fragments of a large and exceedingly well-baked urn were found, but not enough to make out either the size or pattern from.

The next field-day saw the working party bend their steps in another direction, namely, to three hills on the Westerdale Moor, known by the name of Western Howes. These howes, three in number, lie

only about a quarter of a mile north of White Cross, and half a mile north-east of Ralph Cross—two antique crosses of great interest. Erected originally, doubtless, to perpetuate the memory of some tragic deed or striking event, they have long been dumb depositaries of their charge; as much so—though not one-third, perhaps even not one-fourth, their age—as the three neighbour howes of the name and fame of the chieftains sepulchred below.

The tumulus which lay most to the east was the first examined. It was about 28 feet in diameter, and 3½ to 4 high, and presented no tokens of disturbance. Nevertheless, careful search revealed no deposit: simply a large, irregular-shaped stone about the centre, firmly imbedded in the moor, and far too bulky to be moved, even if the diggings around its edges had revealed any existing disturbance of the natural soil in which it lay, and had lain, no doubt, from the time the ice which bore it there had deposited it.

In the meantime, a lad belonging to the party had been at work on the least hill, which lay a score or two of yards to the east of the largest and middlemost of the three. A simple deposit of calcined bones and charcoal on the surface of another “moor-stone” of large size, with no accompaniment, and no protection except 8 or 9 inches of soil, was the reward of his labour. The efforts of the whole party were now directed to a thorough search of the central tumulus, a hill of 31 to 32 feet in diameter. This bore such obvious traces of central disturbance, that the writer felt sure the original deposit had been rifled or destroyed; while its dimensions seemed scarcely sufficient to warrant strong expectations of secondary deposits. It soon appeared that the entire central space of the tumulus, to the extent of a diameter of 13 or 14 feet, had been occupied by a carefully and symmetrically piled mass of stones, large enough to offer considerable interstices in multitudes of places; while on the outside of these lay a series of large flat slabs all sloping inwards. No trace of the original interment could be met with. It had either disappeared or been removed.

But while all the adult workers were making up their minds to a blank day, a boy broke a piece out of the side of a large urn, which had been deposited at a point about 8 feet due east of the centre. In proceeding to extricate this, the writer broke a small piece of the rim of a second urn in actual contact with the first, and covered with a stone barely large enough to close the mouth. On removing this stone, a very beautiful and perfect battle axe of polished fine-grained granite lay disclosed; the extreme length of which is 4½ inches, and greatest breadth (across the socket) 2¼ inches: it weighs 9 ounces. The urn in which this treasure-trove was found was of an entirely new form, presenting more resemblance to the Cornish and Wiltshire urns in shape, than any other Cleveland or Yorkshire urn the writer has ever seen. It is 9½ inches across the mouth, 11 through the shoulder

of the rim, from which the sides go straight down to a bottom 5 inches in diameter, the whole height of the vessel being $11\frac{1}{2}$ inches. It is of thin and well-baked ware, and the rim carefully ornamented with bold encompassing impressions of the twisted thong above and below, the intermediate space being occupied with a series of acute chevrons, pointing upwards, and in groups of three, fitting one within the other. Besides the calcined bones, of which there was no great quantity, the urn contained a small incense-cup, of the barrel shape and damaged exterior which seems to characterize a large proportion of this class of vases in this district. This was found about midway between the mouth and the bottom of the urn, and was placed mouth downwards. Amid the bones were found portions of four bone pins, and a very remarkable bone article about $1\frac{3}{4}$ inches long, and $\frac{1}{2}$ inch in diameter. It is perforated lengthwise, and on one side, about midway between the ends, an orifice, carefully wrought, opens into the bore. It is ornamented by a spiral line winding from one end to the other. The other urn is of the same shape, and much the same dimensions as that noticed at the commencement of the present paper, and contained amid the burnt human bones pieces of two burnt pins.

The discovery of the battle-axe actually within the urn is highly interesting, as it places the period at which these implements began to be fabricated beyond dispute. What was the purpose of the bone ornament (?) it is impossible to surmise. The orifice in the side must surely have been for the purposes of suspension, whether it were turned upwards or downwards when worn. In the one case feathers, or other decorations, may have been fixed in the terminal apertures ; in the other a depending tassel (or its equivalent) may have hung from the intermediate orifice. It was possibly worn as a badge of office or distinction. Certainly the brave with whose ashes it lay commingled must have been one of more than ordinary rank or dignity to have such riches of accompaniment with his remains.

The scene of labour was next transferred to a tumulus about a mile to the north of Western Howes, and known as "Stone Rock Hill." The writer had made an opening into this several months since, at a point about 7 feet south of the centre ; the total diameter being about 27 or 28 feet. The entire structure, save only the ling and the scanty coating of black earth due to the natural decay of its roots and fallen leaves through ages upon ages, was of stone : and a deep hole in the centre, loosely filled and covered with lumps of stone, told the same tale as the irregular surface about the centres of earth-made tumuli. On the surface of the natural soil, and beneath 18 or 20 inches of piled stone-work, the writer had found, on the occasion just named, fragments of pottery and burnt bone, enough to show that a large and fairly marked urn had been broken up there at some time or other ; though when, or wherefore, it was not easy even to guess. For it was evident that the demolition was not in recent

times. Indeed, there seemed no reason to doubt that it was contemporaneous with the piling of the hill; for in no other way could the confused "minglement" of bones and pottery have come to occupy the position they did relative to the stones of the pile above and the sandy soil of the earth below. The writer removed as many of these pieces of urn without further disintegration as it was possible, and succeeded in obtaining enough of the rim, and of the bottom, with pieces of the sides still in continuity, to be able to make out most of the particulars as to size, shape, etc. When all had been removed, finding portions of bone still intermingled with the subjacent sand, the search was prosecuted still further, and, in a few minutes, the removal of a small stone disclosed a portion of the mouth of a buried urn. This was carefully guarded by a circle of flat stones set slopingly, and so as to protect its upper edge from pressure; and owing to this, it was obtained with very little abrasion even, and only one unimportant flaw. It proves to be of 9 inches in height, 6 over the mouth, and 7 in greatest diameter, and very elaborately ornamented on the rim, on the edge of the mouth, and below the rim to the bulge. It is the most carefully and elaborately marked of any the writer has yet met with, and again of a new form. A series of closely set and very irregular zigzags constitutes the marking beneath the rim, while that of the rim itself, and the mouth, is in panels of very close and fine horizontal markings; the panels being formed by the occurrence of vertical lines at regular intervals; the whole being bordered above and below with encompassing lines. It is a singularly interesting specimen of Celtic ware.

On proceeding to ascertain the contents of this urn, after removing some common stones and moor-earth with a small admixture of burnt bone, the circular bottom of some small inverted vessel presently appeared, and by its side the curvilinear outline of another. These proved to be a minute urn, $2\frac{1}{2}$ inches high by the same in diameter over the mouth, and an incense-cup of red ware. The small urn was quite without mark, but the incense-cup ornamented by straight impressions of the twisted thong placed slopingly. The bottom of the cup is of larger dimensions than the mouth, and on one side near the bottom is a small hole, matched by another in the bottom closely adjoining.

This is only the second instance of an incense-cup with the two perforations met with by the writer in this district.

All the particulars of this find are of much interest: the burial of the urn especially, and scarcely less the broken urn and its scattered contents above; the presence of calcined bone in all the earth surrounding the buried urn; the character of its shape and markings; the remarkable circumstance of a small urn and incense-cup both being found within it: the one or the other is usual enough, but the presence of both together seems to be a marked deviation from usage.

As a case for speculation, the characteristics of the interment are prolific in suggestions. May the broken urn and its contents betoken some barbaric mode of triumph over a vanquished enemy? May not the bone dispersed throughout the earth which enclosed the entire urn prompt the idea that, if it did not belong to the body of him whose broken urn lay above, it must once have belonged to the persons of slaves, or captives, or possibly a wife or wives of the deceased chief? Such questions will present themselves to the inquirer—would that a satisfactory reply were as easily pronounced.

**Discovery of a Celtic Kitchen Refuse-Heap at
Normanby in Cleveland.**

[1864, *Part I.*, pp. 162-167.]

The site of this interesting discovery, which was made in the autumn of 1863, is a point on the flank of Normanby Bank, about 250 feet below the highest ground of the moor above, and 450 above the level of the sea, which, at the nearest point, is more than 4½ miles distant by the air-line. Before the iron mines in the bank were wrought, or, in other words, only a few years ago, the seam of iron-stone must have cropped out in very near vicinity to the soil which lay above this curious memorial of Celtic times. As it is at present, much excavation has taken place, and the face of the outcropping seam presents a perpendicular wall of some ten feet high. Opposite to this, and at a distance of less than twenty yards, is the bank in which the deposit to be noticed has been laid open to view.

The immediate cause which led to the discovery was that mining necessities led to the formation of a new road at a level lower by about 16 feet than an existing one; this, moreover, could scarcely be less than 5 feet below the level of the circumjacent modern surface. While the workmen were engaged in excavating and removing the soil, in a direction mainly parallel to the old road, their attention was drawn to the presence of many bones in a remarkable state of preservation; while, a little lower, they came upon a layer which seemed to consist in great degree of shells. The interest of the men as well as of the engineer being excited, a considerable collection of the strange matters was speedily formed, inclusive of the bones of various animals, many fragments of rude pottery, and portions of three different querns. Moreover, among the other bones, part of a lower human jaw, with three of the molars still in the sockets, was discovered, together with a substance which, at least, presents a strong resemblance to hair, possibly human hair. The writer was on the spot, for several hours each day, on the 2nd, 10th, and 17th of December, and he took part in very nearly all the excavation which has been made subsequently to the formation of the new road.

On further investigation more bones and pottery have been found, until, in all, portions of not less than ten or twelve vases have been obtained, and many stones-weight of the bones. These appear to have belonged to animals of the ox kind, to sheep, deer, and swine. One skull of an animal of the first-named species, with the horns still attached, and unbroken to the distance of 3 or 4 inches below the orbits, is pronounced to be that of *Bos longifrons*. It is small in its dimensions; but, to compensate, multitudes of other bones, belonging presumably to the same species, testify to a very considerable size indeed in the individuals who owned them. Many jaws, for instance, together with bones from both fore and hind legs, and ribs, would not disgrace the primest prize beef of the present day. A tusk of a small boar, tolerably entire, was also picked out, and afterwards a part of the opposite tusk and jaw of another. But the bones of this animal were comparatively scanty among the general mass. There was no lack, however, of bones of deer and sheep, at least of deer or sheep; but there can be scarcely any doubt as to the presence of both. The variation in size of corresponding bones of these creatures was very striking. Some were so small that the animals to which they had belonged must have been almost dwarf specimens of their several tribes. In answer to a suggestion that they might be the bones of young animals, it may be stated that the bones were as hard and perfect at the edges as elsewhere, whereas those of animals in early growth are cartilaginous at their edges and for some space towards the centre. The writer has partaken of a leg of well-fed Welsh mutton which did not weigh five pounds: more than one blade-bone from the shoulder that passed through his hands at Normanby suggested a shoulder of mutton scarcely heavy enough to have grown on a sheep of even that diminutive size.

Besides these bones, many of which still retained no small degree of toughness, were a great number of others much smaller and very much comminuted, or possibly even quite decayed, and only betokening their former presence by the occurrence in their casts of a mineral which accompanied every bone that was exhumed, in greater or less quantity. This was the earthy phosphate of iron, and when first dug out was of a dirty white hue, and marly consistency, but when it had been exposed to the air for some hours it assumed a very beautiful blue tint. Besides the other bones there was what may yet prove to have been the tooth of some large predaceous fish.

To pass now to a notice of the shell-bed. This was about 8 inches in thickness, and consisted principally of shells, exclusively those of the common marine mussel and the ordinary "pinpatch" (as the periwinkle is locally called). These were nearly all perfect in form, but of the consistency of water-soaked paper, and the periwinkles had lost most of their colour. The mussels, on the contrary, are unaltered in this respect, and after careful drying

resume much of their shelly consistency. All these had evidently been opened, for no case whatever of the two valves still united at the hinge presented itself. Intermingled with the shells was a quantity of drift vegetable matter, of various sorts, and soil, such as may be seen by the side of any stream after a flood.

The average depth of the lower part of this shell-bed below the modern surface cannot be stated at less than 18 to 19 feet. Below it lay other sedimentary matter, still enclosing fragments of wood, sticks, a stray shell or two, and pebbles; while, in one case, the root portion of the trunk of a tree, with the roots still *in situ*, was dug out. The larger proportion of bones and pottery, as well as the broken querns, was dug out from just above the shell-bed; though, in some cases, pieces of pottery were found at least 18 or 20 inches higher.

The following rough sketch of section will illustrate the relative position of the several beds and their contents.

The mixed matter which lies above the shell-bed, like all the rest, bears unmistakable tokens of having been deposited in water; and, moreover, in water not liable to any great commotion, or even to the disturbance which might be occasioned by the hasty influx of a considerable volume of water. The stream which supplied it must have been small, and not liable to be ever converted into a torrent, however small. For large quantities of matters, which must have been very light when deposited, lie equably diffused throughout the bed, which is limited below by the shells, above, at a distance of about 5 feet on the average, by an ochrey-yellow stratum of several inches thick; and these matters are leaves of trees, twigs, sticks, knots or lumps of wood, small pieces of charcoal, moss, bracken, ling, sedges, rushes, acorns, hazel-nuts, a few stray seeds of plants; besides two or three wing-cases of beetles. These substances abound most in the lower layers of the bed; higher up it consists more exclusively of earthy matters. The ochrey seam above could only have been deposited in still water; and above that again evidences of the same fact abound.

An examination of the section presented further along the new road gives an intelligible hint as to the manner in which a hollow capable of containing an accumulation of water, may—if not must—have been formed; for there is disclosed the existence of a “trouble,” or fault, in the ironstone, the inner surface of which (or that which lies towards the deposit) is, so to speak, puddled with a facing of clay and pebbles that may be traced downwards until lost beneath the level of the new road. One thing else may be noted as certain, that there was a time when no accumulation of water existed here, and that at that time trees were rooted at a level of more than 20 feet below the modern surface. How—by what means—this level was so affected as to be converted into the bottom of a quiet pool of certainly many yards in diameter, must always remain a mystery;

but there is not the slightest room for doubt that such a change has occurred ; any more than that, after the change, the pool became, at some time or other, and almost certainly not long afterwards, the receptacle of abundant refuse matters left from the food of a human community. That this community consisted of a family or families of Celts is, I suppose, open to no kind or degree of doubt. The pottery alone is of such a description as to decide that question. Portions of not less (as has been said above) than ten or twelve vessels, in all, have been obtained, most of them of large size. One was of 21 inches in diameter across the mouth, three or four others between that and 15 or 16 inches ; several others, uncertain ; and one, by very far the least of the whole, not more than 4 or 5. Two or three of these, of which portions of the mouth were found, are formed without lip or projecting rim ; the others have a mere thin rim or flange, of small width, like many of the domestic vessels of the present day. The querns were formed, one of a hard, close-grained free-stone, the other of the so-called "white flint," or "crow-stone," of the neighbourhood ; one of the two being a segment of a flatter cone than the other, and having a rather convex bottom against a slightly concave one in its companion. The third had been brought to the conical shape, but was left quite incomplete both at bottom and top, and, of course, therefore, no perforation was so much as commenced. No implement of any sort or kind could be discovered, unless a longish wooden peg and a couple of what might be rude bone pegs (rather than pins) may be looked on as such. Nor was any personal ornament recovered, except half of a jet ring, very beautifully formed and polished, and of about the same dimensions as a fair-sized modern ring for keys. But although no implements were found, pieces of wood with the marks of cutting, or rather chopping, upon them, were found in four or five different cases ; and in two instances, at least, bones that had been cut across, more or less obliquely, were observed. The chief characteristic of the cut edges in the bones was roughness ; the implement employed had rather burst its way through than severed it, and the cut surfaces of the wood suggested the employment of a tool which, whatever else may have characterized it, had anything rather than a keen edge. The contrast between the surface of a chip from a tree felled yesterday and that of the old stone-hatchet hewn oak-tree coffin in the Scarborough Museum, is scarcely greater than that between the same chip and the cut edges of the wood from this Normanby find.

In the instance just now quoted—the remarkable Gristhorpe find—articles of bronze—a javelin head and a pin or two—were found associated with a variety of flint articles—arrow-heads, knives, etc. ; a testimony, sufficiently supported from other sources, that the use of stone axes was continued after the introduction of metal weapons. So that there appears to be absolutely no foundation on which to rest

a conjecture as to the date of this Normanby deposit. It may come down nearly to historic times, in other words, be approximately contemporaneous with the burial of the Grishorpe chieftain: or it may date back far further in the remote past. One bone which the writer, on his first visit, picked out from among the mass already collected, seems to favour the latter supposition. It is the metatarsal bone from a sheep or deer, and, besides being perforated throughout, has a transverse hole bored through about midway from either end; in this respect presenting a close analogy to a relic taken by the writer from an urn undoubtedly belonging to an early Celtic burial.*

It may be added that the human jaw is peculiarly massive and broad, and must have belonged to a person of herculean frame. The three teeth still left are of enormous size; very considerably larger than those in the head of the Grishorpe skeleton, which is that of a man of 6 feet 2 or 3 inches. Another peculiarity about these three teeth, which strikes the eye quite as forcibly as their great size, is the degree in which they have been worn down, and flat, by use. Indeed, the crowns are gone; and thus the fact appears that though beef, mutton, venison, and pork, varied with smaller game and subsidized with shell-fish, may have formed no inconsiderable items of food, at least occasionally, to the owner of these teeth and his relations and friends, still, for a considerable part of his diet, he must have depended on a supply of matters of such a nature as to grind down almost the entire enamel of the most formidable set of grinders the writer ever beheld.

As to the special form in which the deposit has presented itself to our eyes, it seems to be almost impossible to frame any theory to account for it. The ochrey bed has a slight dip towards the west and north, leading to the conclusion that the suspended sedimentary portion or its constituents must have been poured in from the side of the steep bank at the bottom of which is the ironstone wall mentioned above: a conclusion which perhaps might have been anticipated. As far as it could be traced, the shell-bed appeared to partake of the same slope. Yet nothing could be clearer than that none of the shells composing it had been "rolled." Not one among them presented the slightest traces of abrasion, nor was there a single instance among the bones which suggested so much as the notion of their being water-worn. The edges of the beef ribs were so sharp that the question was mooted once and again, "Are they not artificial?" while the fracture in the bones which had contained marrow—all of them, almost to one, broken across—was strangely fresh and angular still. Besides, a current capable of moving the massive fragments of the querns must have worn the pottery to nothing, rounded off all the edges of the broken bones, and reduced the shells to fine fragments. It is abundantly clear, then, that the shells and other matters were

* *Gentleman's Magazine*, November, 1863, p. 550 [*ante*, p. 239].

found just where they had been thrown; and then the inquiry suggests itself, "But, on that supposition, how is the flat, layer-like form of the deposit to be accounted for?" And truly, in the absence of anything like evidence, it is not easy even to suggest an answer. The settlement, whether consisting of one family or several, may have been formed on the side of the bank above the pool, near the point at which the small supplying stream entered it. Or it may have been a miniature "lake settlement." Or—what has no ground, as far as the writer knows, in any British archaeological discovery—it may have been constructed in the trees overhanging the pool, the boll and roots of one of large size having actually been (as noticed above) discovered *in situ* during the process of investigation. The first supposition makes the equable dispersion of the shells at least partially practicable, but supposes the bones, pottery, and stones deliberately thrown far out into the pool. The last is unsupported by experience. The second, besides being arrived at by a *quasi* exhaustive process, seems to meet the exigencies of the case better than either of the other two; only, if ever a lake-dwelling existed, if could only have been placed at a very short distance from the margin, and all traces of it must have been dug away in the earliest excavation made on the spot in connection with the initiatory mining operations. There is certainly another supposition, though fully as much unsupported by tangible evidence as either of these others, namely, that the dwelling may have had for its site a kind of small promontory, or possibly even an island-block detached from the bank, precipitated forward when the ironstone fault was occasioned, and afterwards connected with the bank by some narrow gangway, removable at pleasure. And it is not quite unworthy of mention that the human bone was found, according to the testimony of the workmen, in a place where the pool must have reached its full depth with a very rapidly sloping bank.

What may be called the geological features of the case—the formation of so many feet of sedimentary matter above remains of the epoch these must certainly be assigned to—seem to the writer of extreme interest, and to be quite worthy the attention of those to whom the questions discussed in Sir C. Lyell's recent publication are matters of attentive consideration and concern.

Examination of a Large Houe on the Skelton Moors in Cleveland.

[1864, Part I., pp. 705-709.]

About the middle of September last the writer commenced operations with his party of workmen on a tumulus locally known as "Turn-gate Hill," but marked "Herd Houe" in the Ordnance Map, as well as so named in records of ancient perambulations. It was difficult to make out any satisfactory estimate of size—accurate

measurements were out of the question—in the case of this grave-hill: for it was at first sight apparent that its present form was very different from that in which it had been left by its Celtic builders. It would appear originally to have had a low earthen ring encircling it; that it measured about 55 to 58 feet in diameter, and not less than $7\frac{1}{2}$ to 8 feet in height at the centre. But there was the ill-omened cup in the middle above, instead of the conical, nicely rounded summit; and the south-east and north-west flanks both showed unmistakable traces of wholesale disturbance. The position of the hill is bold and commanding in the extreme. Situate at the very edge of a bluff which looks out far away over the comparatively level ground that lies to the north between it and the sea, and then over the sea itself, it also commands a widely extensive prospect east and west, and is itself a remarkably prominent and striking object to everyone approaching from the west or north-west. Indeed, it has often appeared to the writer, in years long past, to, as it were, obtrude itself in a singularly marked manner on the passenger's notice.

Operations were commenced at a point about 25 feet due south from the centre, and a 4 feet trench extending 9 or 10 feet both to the westward and eastward was the first part excavated. At about 2 feet deep a large pile of loose stones, following the shape of the hill, was cut upon; and indications of burnt bone were met with at 22 feet south of the centre. These led to the discovery of a plain interment, without even the amount of protection which could be given by an overlying flat stone. Shortly after it became apparent that a cavity had been wrought in the stone pile, to the extent of 2 to 3 feet in diameter, and then filled up with earth, and made the receptacle of a small neatly formed and marked urn. This urn was $5\frac{1}{2}$ inches in diameter and 7 high; while over and about it were the fragments of a second, placed in studious disarray, but in such quantity that its original size and fashion were easily made out.

No further discoveries were made in the course of this, the first day's labour; only the work was so far prosecuted, and in such a way, as to make a continuance of it on a subsequent occasion as practicable and convenient as possible. Indisposition and other causes deferred the "subsequent occasion" until Monday, March 21, in the present year. Less than an hour's labour on that day disclosed two urns, both of them small; one covered with a flat stone, the other quite unprotected from above; and standing at a distance of about 20 to 24 inches from each other. The careful removal of the surrounding soil from these, preparatory to their extrication, showed that they rested scarcely on, but quite close to, the ends of a flat stone of 16 or 18 inches wide. When this was removed, a third and much larger urn was disclosed beneath, but unhappily a good deal broken. This was taken carefully out, and, after a very little more

work had been employed about the place, a fourth urn was found at about the same medium level with the two first, but some 12 or 15 inches nearer to the centre of the houe, inverted and empty.

On examination, the contents of the two smaller urns proved to be the calcined bones of children, apparently of very tender years. One or two of the plates of the skull appeared scarcely thicker than an old sixpence, and part of what was probably the thigh-bone did not exceed the dimensions of a man's little finger as to diameter. On removing the intrusive soil from the larger urn, there was seen lying on the very surface of the mass of calcined bones the eye-part of a well-made bone needle. Careful search was made for the other parts, and was successful; and the needle, 5 inches in length, and with something more curvature than an ordinary sacking-needle, has been happily restored. From the character of the bones accompanying this needle, it seemed more than probable that the remains were those of a female, and of small stature.

The presumption surely is that she, whose frame in life had in part consisted of these bones, was the mother of the two children whose urns stood above; and that, possibly at least, the empty inverted urn must be a kind of cenotaph to the father, slain in battle, but whose body it had not been possible to recover.

This group of urns was found at a medium distance of 12 feet south from the centre of the tumulus, and within the barrier of loose stones mentioned above (which did not reach a lower level than about 2 feet above the natural soil), and at a depth of 3 feet from the surface.

Shortly afterwards, at a point about 5 feet more towards the east, another small urn, with a piece or two of a broken one in contact with it, was discovered. This was found to be marked with linear rows of dots, both on the rim and below, and to contain a child's bones. More to the east still, a large urn protected above by a flat stone was met with, which, however, had burst all round from the pressure of the superincumbent earth, and was seen to be very full indeed of calcined bones. It was removed with much care, and, at the cost of no little trouble, without further breakage. Upon subsequent examination there were found, among the human bones it contained, two perfect bone pins; one straight and thick, the other curved and beautifully rounded and tapering; a portion of a third, much finer; and a number of pieces of flint burnt quite white, and which had certainly formed a weapon or implement of considerable size. The discovery of another urn, quite plain and a good deal broken, soon after ensued; this was of about 8 inches high by $5\frac{1}{2}$ in diameter at the mouth, and contained only a very small quantity of calcined bone, mixed with earth and a little charcoal. Another, smaller still, perfectly plain, without any approach to the typical overhanging rim, almost more like a horn tumbler-shaped drinking-

cup, with a slightly curved outline at mouth and foot, than any other vessel, was next obtained. This, too, contained very few bones.

The last find of the day was of a large, well-moulded urn about 14 inches high, all the parts of which, notwithstanding numerous cracks, were still in their place. This occurred at a point about 9 feet south-west of the centre, and 4 feet deep; and its mouth was covered by a remarkably thick stone—to be employed in that manner. A good deal of the moor-soil had infiltrated into this vase; but, on its removal, a large quantity of bones, filling two-thirds of the whole cavity of the vessel, were found in it. Among these, and just covered by them, lay a very carefully wrought and moulded war-hammer or battle-axe, seemingly of greenstone, rubbed quite smooth, or, to a considerable extent, polished. Besides these nine urns, the broken pieces of two others, disturbed and destroyed by the authors of the extensive dilapidations in the hill above noticed, were met with; one of which had been large and massive, but quite plain. A calcined flint arrow-head, of the leaf-shaped type, was also found among the disturbed soil and near some of the broken pottery; and besides this a good knife, three thumb-flints (one very carefully and finely wrought), and a very large quantity of roughly broken flint, or calcined pieces of the same substance, were picked up at different parts of the barrow, particularly from among the interstices of the stone-work.

The latter portion of this day's work brought the workmen into contact with a conical stone cairn, evidently not occupying the middle of the tumulus, and which therefore had not been materially interfered with by the former excavators of the centre. They had disturbed a part of its southernmost flank, but nothing more. The 31st of March was therefore given to the investigation of this cairn. It was soon found to be not less than 16 feet diameter at its base, and about 5 feet high, and to have been piled together with great care, and in a very symmetrical manner. Its centre covered a spot about 8 feet east-north-east of the centre of the hill, and in the clay on its flank, nearly due east from the centre of the tumulus, there was an unprotected and unaccompanied interment of burnt bones: those of the skull being—for bones appertaining to a burnt body—singularly entire. They had given way at the sutures, but besides that, the upper parts of the skull were but little damaged. On removing the loose stone-work of the cairn, it presently became evident that, approaching to and about its centre, the open-work was continued much below the level of the soil.

Eventually an oval pit, $6\frac{1}{2}$ feet by $4\frac{1}{2}$, was disclosed, and it was found to be continued downwards to a depth of nearly 4 feet. But water stood many inches deep in it, and the work of investigation was thereby rendered both difficult and unsatisfactory. In one place, about $1\frac{1}{2}$ feet deep, two small pieces of pottery occurred, and no small quantity of calcined bone and charcoal. In fact, these seemed

to be scattered loosely over the floor and among the stones just above the floor, throughout a great part of the area of the pit. Altogether the appearance of this pit and its contents was very perplexing, and not a little anomalous. Certainly no disturbance had taken place in modern times. Equally certainly, if disturbance had taken place in ancient times—and there were tokens which seemed to do more than hint at it, such as the apparent displacement of side or lining stones, and the like—still the pile had been carefully put together over the disturbed ashes, and that most certainly anterior to the heaping together of the earthy constituents of the houe as remaining to modern times. The writer's own impressions are that here there is another instance of the wanton or purposed violation of a grave-pile in extremely remote times, and, as such, due to some intrusive or conquering tribe. Another very striking case in point was met with in a houe some seven miles more to the south, and described in a former paper inserted in this journal.*

In this last day's work there were also met with many pieces of flint, both burnt and unburnt (three of the former occurring among the loose stones and bone in the pit), as also fragments of three more urns broken up in the modern disturbance of the barrow. One of these is, equally in its consistency, thinness, shape, and colour, unlike the sherds of a Celtic urn ; having been very hard baked and not above one half the standard thickness. Another was a portion of a vase which had been much more elaborately and beautifully ornamented than any urn the writer has yet met with, or heard of as found in Cleveland. And what is unusual, the ornamentation was continued on the inner side of the vase, and not simply on the edge of its rim. It must have been a remarkably beautiful specimen indeed of the Celtic cinerary vase.

There was, perhaps, more in the numerous and varied contents of this grave-hill to suggest the idea of a family burial-place than in any other which has come under the writer's notice. The group of four urns, specially noticed, is alike interesting and significant ; and no less so the frequent occurrence of what were without question the remains of children. The very large quantity of bones, also, in two several instances, deserves special notice. In each case there was nearly enough to fill a half-bushel measure. Bateman gives it as his opinion that in the later period during which cremation prevailed the bodies were more completely burnt, and the residuary matters would consequently occupy far less space, and so be contained in an urn of much smaller dimensions.† Admitting the validity

* *Gentleman's Magazine*, Nov., 1863, p. 551 ; compare also *Gentleman's Magazine*, Sept., 1863, p. 270 [*ante*, pp. 240 and 232].

† "It would appear that a considerable interval elapsed, in which burial by inhumation was in vogue, before a return to combustion rendered cinerary urns requisite, and in the meantime some improvement in the ceramic art had taken place. We find the urns much smaller, from 5½ to 9 in. high. . . . It will be

of his conclusion, even the secondary interments in these Cleveland grave-hills must be of very great antiquity : an inference which is abundantly enforced by the most various considerations, and weakened by none.

Again, Professor Worsaae starts the idea that commonly, if not generally, secondary interments may be regarded as those of persons whose means or distinction were scarcely such as to enable or warrant their surviving friends to rear a special tumulus for their interment. This is an idea which, in our Cleveland grave-hills, seems to meet not only with no confirmation, but in many cases with marked contradiction. The inserted urns and their contents are continually found to be larger, finer, and more indicative of the distinction in which the buried man was held while living, than the urns at the base of the hill. Besides which, whether these large collections of interments betoken the family or simply the tribal burying-place, on either supposition the Danish antiquary's suggestion is excluded.

Further Investigations of Grave-Hills in Cleveland.

[1864, Part II., pp. 19-23.]

On Tuesday, April 27, the writer proceeded to examine two houes situate on the high grounds overhanging the Rawcliff Bank woods in the parish of Skelton. Both of these grave-hills were in the enclosed land, and one of them had been a good deal mutilated ; partly, no doubt, by the persons engaged in the Ordnance Survey, who had made it a station, and partly, it would seem, by other hands as well. The other was intact, and as it formed, as it were, a kind of cap to a very gently rising natural eminence, it was extremely difficult to decide where man's hand had commenced the process of adding to or smoothing down the features of nature. However, as near as one could estimate, the dimensions of the hove proper were about 30 feet in diameter : the entire depth at the apex certainly did not exceed 2 feet.

The writer commenced proceedings here by removing the turf over a central area of about 15 feet square, and the intense hardness of the soil is not easily conceivable. It was indeed almost impossible to drive the spade to a sufficient depth to remove the sods in such a condition as to admit of their being returned to their places after the examination was complete.

The occurrence of charcoal in scattered fragments, and here and there in patches of larger size, soon gave encouragement in supposing that the labour employed would not be fruitless, and an hour's work revealed the presence, in a place about 3 feet north of the centre, and at a depth of perhaps 1½ feet from the surface, of a deposit of

evident that the bones must have been more perfectly burnt than before, to enable them to be enclosed in such small vessels."—"Ten Year's Diggings," p. 281.

some intrusive matter, which, from its nature and appearance, could scarcely fail to belong to an ancient interment. Clearing the surface of this intrusive matter, a nearly circular area of some 14 or 15 inches in diameter was displayed, the removal of a few inches only of which gave tokens of the presence of calcined human bone. The deposit reached a depth of nearly 3 feet from the surface, and was, so to speak, divided into two portions by the interposition of a layer of matter containing no traces of bone whatever. A few small fragments of calcined flint accompanied the bone, which occurred in such large and easily distinguishable pieces as to necessitate the inference that it had been very imperfectly burnt. Many of the vertebrae, for instance, were as perfect in form as they had been before being subjected to the action of fire.

Continuing the investigation in other parts of the space now laid open, the writer's attention was specially called to a place about 5 feet south-east of the deposit just named, where the soil presented unmistakable evidences of the action of fire. Indeed, the appearance was precisely that of brick-earth burnt without much previous working or setting up in shape, or perhaps of brickdust made to cohere by the infiltration of some adhesive substance. This substance was seen to lie in a kind of domed form, and to be nearly 2 feet in diameter. Proceeding to remove the upper part very carefully, the thickness of the red deposit proved to be some 3 or 4 inches, and the whole to be in connection with a circular wall of the same substance. Within the line of demarcation thus formed there lay a second large deposit of very imperfectly calcined bone, with here and there a flake or two of burnt flint, which seemed to have belonged to an implement of no great size or elaboration of form. The lower parts of the interment rested on a layer of charcoal, and this again on a bed of inserted clay, which presented the same appearances as the walls and dome, only to a less degree.

The writer has given the details of this deposit with some minuteness, as it appears to him to present features alike novel and interesting. There seems no possible way of accounting for the appearances observed save the following ; at least, none that is not open to grave objection. A pit must have been formed in the natural soil (stiff clay with much gravel intermingled), and then lined at bottom and round its sides with prepared clay. Fire was next inserted, and kept up until the heat had been great enough and sufficiently long continued to bake the walls, and the bottom also as far as it would be able to descend. Then the bones and commingled soil and charcoal were inserted, and a new layer of prepared clay placed over all, upon and around which again fire was heaped, until a solid dome in continuity with the walls was baked as they had been, and a fixed kind of quasi-urn formed to enclose the deposit there committed to the ground.

Another observable feature in this and some interments found under similar circumstances—that is to say, enclosed in a small pit or cavity hollowed out below the level of the soil, but unaccompanied and unprotected by urn or other means—is that, mixed with the bones and charcoal, there was found a considerable quantity of an earthy matter,* the origin of which it is difficult to account for, and which is never by any chance found among the bones in an urn or in a plain inserted interment. It is of a brown hue, very light and soft, and does not appear as if simply due to a vegetable source, and still less to the sandy soil of the moor surface. The writer's surmise is that it proceeds in part, at least, from an animal source, and may be due to the incomplete incineration of the human body there mingled with its parent earth.

The excavation of the other houe yielded no results beyond the ascertaining of the fact that previous disturbance to a considerable extent had really taken place.

An attentive consideration of all the circumstances attending the deposits just described seems to warrant the conclusion that they belong to a very remote period indeed, one even considerably more remote than those hitherto noticed in this series of papers.

On May 24 a small tumulus of about 25 feet in diameter and 2 feet in greatest height, and situate a little to the south-east of a larger barrow called Brown Rigg Houe, was subjected to examination. On commencing the work at a point about 6 or 7 feet south of the centre, and ordering it so as to carry a wide trench through that point northward, a very flat, conically arranged pile of stones almost immediately claimed attention. Removing these, and proceeding to a careful examination of the soil which in a somewhat raised form lay beneath them, signs of much burning were immediately disclosed. Stones and sand, burnt to redness and intermingled with charcoal, formed fully as much of the substance-matter as the unaltered soil of the moor; and further research showed that a shallow excavation had been made on the spot, a small pit hollowed at its lowest point to receive the interment, and then the excavated soil and burnt matters, mingled together, returned so as to fill the entire cavity and form a low heap above it. But long before reaching the interment—immediately above it, however—an axe-head or hammer of basalt was found, in the very midst of a quantity of charcoal and charred soil and stones. Unhappily, as is the nature of the basalt found in the remarkable dyke intersecting this district, the substance of the hammer was so weathered or corroded that it proved to be a matter of extreme difficulty to remove it without entire disintegration of its parts; and as it was, it was only by carefully excavating all together, soil and hammer in one mass, that it was brought away in a condition approaching entireness. A crust of nearly a quarter of an inch in

* *Gentleman's Magazine*, 1863, vol. i., p. 709 [*ante*, p. 222].

thickness was almost completely deprived of coherence, and fell away on the slightest touch, before it was secured by the absorption of a quantity of thin cement. When it became possible to examine it more closely it appeared to have been very carefully wrought, with a bold and not inelegant curvature of outline, especially near what must be called the face of the hammer ; and to have the entire space surrounding the perforation for the shaft, both above and below, sensibly countersunk. Very different in outline and detail to the others the writer has met with here, it scarcely yields to either in original elaboration and symmetry of form.

Pursuing the search, after the successful removal of the hammer, the greater accumulation of charcoal which was met with about a foot below the place at which it had been found afforded sufficient indications of the vicinity of the sepulchral deposit. It was found, as already noticed, in a small pit hollowed out beneath the level of the moor surface, and was remarkable not only as being intermingled with the same kind of substance as that described above, but as obviously comprising only a small portion of the bones of an adult in the prime of life. What there were, comprising portions of the skull, the femur, the tibia, etc., were not at all comminuted, but rather in the same condition as those which so frequently fill the large urns of the district, or those spoken of in the earlier portion of this paper. But there was only a very small proportion of the whole, as was remarked by an experienced medical man who was present, as well as by the writer.

On Saturday, June 4, a tumulus on the Guisborough Moors, without traditional though not without local name, being designated as Prettyhut Houe in the district nomenclature, and which was one of the stations of the Ordnance Surveyors, and as such is marked in the maps as 1,079 feet in elevation, was selected for examination. This hill was about 40 feet in diameter and not less than 6 in height ; but accurate measurements were out of the question, in consequence of the wholesale disturbance almost every exterior part of the houe had been subjected to. For not only was the Sappers' cairn upon its summit, but a watcher's hut, now roofless, occupied a considerable portion of the eastern side, and the materials of both were stones derived from the tumulus itself. Thus the stones which had once girt in the base of the hill were all gone, or all but one or two, and in other places it had been greatly pulled to pieces in the process of extracting its stony material. A burnt arrow-head of lance-head shape, picked up on the outside of the barrow, suggested the probability that, while these disturbances had been proceeding, at least one interment had been met with—a suggestion which the labours just commencing did not at all invalidate, for at a subsequent period it was found in one place near the centre that the hill had been penetrated to the very foundation of the pile upon the solidly fixed

pavement of "moor-stones." However, a small urn, upright and empty, which was found at distance of $12\frac{1}{2}$ feet, a little to the east of south from the centre, in a kind of rude cist or chamber of small dimensions, showed at an early period of the investigation that the labours of the day were not to be quite without tangible results. Later on, and from 6 to 8 feet nearer to the centre and in much the same direction from it, an inserted burial of calcined bones was met with, which apparently had been placed about $2\frac{1}{2}$ feet below the surface. No urn accompanied this deposit, nor could any bone implement be discovered among the other bones, of which there was a considerable quantity; but a very large and perfect knife, of a trapezoidal shape, unburnt, and a nearly entire javelin-head, burnt until it resembled fine white porcelain, were obtained. And with this concluded the discoveries of the day.

The urn is less than 6 inches high, and about 5 in diameter across the mouth. It is of the so-called "flower-pot" shape, and only the second of that description met with during the writer's researches. The ornamentation consists of a series of impressions of the twisted cord passing completely round the vessel, three on the inside or lip of the mouth, one on the outermost edge of the same, and the others at regular intervals below. It is worthy of observation that the other flower-pot-shaped urn (just adverted to) was obtained from a tumulus which lies about a mile due east from the one at present under notice; and that in it also a burial accompanied by an unburnt knife* of exactly the same shape and character as that just mentioned, only much less, and a single large piece of burnt flint, was met with. Such correspondences and coincidences very surely cannot be merely accidental; but what their actual value is, it may not be easy yet even to attempt to define.

Further Discovery of Relics connected with the Remote Occupants of Cleveland.

[1864, Part II., pp. 304-308.]

It will be in the recollection of our readers that an interesting discovery of shells, bones, querns, etc., was made, some months since, at Normanby Bank, in Cleveland, and a moderately detailed account of the same was given in this journal not long after [*ante*, pp. 241-246]. The writer has now to record a somewhat similar find made in another part of the same district.

A short time since it was found expedient to supersede the existing accommodation-road to Barnaby Grange Farm, which crosses the Cleveland Railway on the level, by a new one carried beneath the line. While prosecuting the necessary excavation, and after reaching a depth of a few feet, a variety of bones, most of them in exceedingly

* *Gentleman's Magazine*, 1863, vol. ii., p. 127 [*ante*, p. 229].

good preservation, and with an abundance of earthy phosphate of iron investing them, were dug upon. These were carefully collected, and have now accumulated to a mass of considerable extent. Besides the bones, an occasional fossil—rolled specimens only—was picked out; a mussel-shell or two of the common marine species; traces of other shells in some numbers, the entire structure of which had become obliterated; and portions of some larger and more massive shell, certainly a sea-shell. But the most remarkable of the non-osseous matters was a folded and doubled metal plate, embossed and engraved.

On examination the bones were found to belong to the horse, *Bos longifrons*, the swine, and—at least, presumably—two species of deer. The skull of a horse is there, and, from the crest down to several inches below the orbits, in very good preservation; but the entire portion comprising the bones of the nostrils and the extremity of the upper jaw is wanting. A lower jaw, however, with five of the “nippers” still in their places, and both of the tusks, is present; as are also the chief portions of the higher part of the same jaw on either side. Two of the cervical vertebrae, together with the first bone of the neck (*atlas*), as well as some from the back, occur also; besides a *humerus*, one or more of the bones from the fore-arm, or *radius*, and a “coffin-bone.” These bones are specified, because from a comparison of them with each other and with the corresponding parts of a living horse of fourteen hands, and from other comparative measurements, the conclusion seems to be enforced that they were constituent parts of a small horse of not exceeding thirteen hands, whose characteristics were a remarkably long head with a comparatively broad forehead, much vaulted, and with a narrow jaw, a round hoof of full size, and strength rather than speed. It is more than possible that bones from the skeletons of at least two horses appear in the collection in question.

Further portions of the bones from the head of at least four specimens of the boar—not to refer to the other sex—are present, two of them with the tusks still in their places. None of these animals seem to have been very large. Bones from the skeletons of *Bos longifrons* were found in greatest abundance, inclusive of the upper portion of a skull with the horns attached; and besides these, not a few which must be referred to deer. A fragment of horn, about 4 inches long and $1\frac{1}{2}$ inches or $1\frac{3}{4}$ inches in diameter, independently of other criteria, appears to indicate the red deer as the one-time owner of these bones; and there are constituent parts of the bony structure of several such animals. Besides, there are bones which may have belonged to a much smaller deer, such as the roe, or which might be due to a sheep; probably, however, and on many considerations, to the former.

Next, as to the place or position in which these matters were found,

and the concomitant circumstances noticeable in the find. The bones were met with at a medium depth of 8 feet below the modern surface, which seems to have been raised by none but natural means, and in a deposit which was evidently due to the agency of a strong current of water. Wherever the bones occurred in greatest numbers, the surrounding matter was composed in great proportion of what a sweeping stream would be sure to be charged with, sand or silt, portions of various vegetable matters—such as moss, twigs, pieces of stick, knots and lumps of wood—shells, small stones, and the like. And all these deposits were laid in cavities or deep basins in a gravelly matrix, which itself bore unmistakable evidence to the fact that it had been borne in and deposited by a strong current, but one of varying intensity, and almost certainly of only occasional activity. The bed on which all this deposited matter lay was an undulating surface of clay, as seen in section ; each undulation probably representing an original natural basin of no very great size or regularity of form. It appeared to the writer, moreover, that the gravelly beds therein deposited must have been peculiarly liable to the formation of gully-holes from the continued quieter action of the stream, still existing, which occasionally in those old times became a torrent, and that such holes would naturally become the receptacles of all such matters as in time of flood might be expected to be put in motion before such weighty objects as the large stones which formed some of the coarser beds of gravel. Such a gully-hole is at present to be seen near the trifling run of water above referred to.

The source from whence the residuary matters specially under mention were derived is another and a more difficult problem. Not a few of the larger bones are split longitudinally, though the variation in this particular between the Normanby bones and those now in question is very striking and significant. There the rule, almost unbroken, was that all the bones which had contained marrow were found broken ; here the rule is the other way, only with distinct exceptions. Still these broken bones must point to human agency ; for it does not seem possible that they should have been broken as they are by any other instrumentality. And besides these broken bones, the presence of the mussel-shell and of the more massive shell mentioned above proves, even to demonstration, the active presence of human beings in the district through which the current swept which deposited the various matters now under notice. The site of the deposit is not less than $6\frac{1}{2}$ miles in a direct line from the sea, and the hills, in the descent from which the stream acquired its swiftness and force, lie $1\frac{1}{2}$ miles more seawards ; and consequently the sea-shells must have been carried 4 or 5 miles inland before they could have come under the influence of the water which deposited them where they have been found.

Whether the horse, in common with the ox, the pig, and the deer,
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furnished a portion of the food of those who transported those shells from the sea, or whether it had been domesticated by them, is a question which must be left unsettled. Perhaps the absence of all matters appertaining to horse-furniture, taken in connection with a remarkable fracture in the front of the skull or forehead,* may lend a faint support to the notion that it supplied food. But the more probable supposition seems to be that the bones in general were the bones of animals which had died in the course of nature, yet in such places that they were not out of reach of the rushing waters of an autumn or winter flood, which swept sufficiently close by the site of human habitations to carry off some portion at least of the refuse matters accruing from the different sources of their inhabitants' subsistence.

It still remains to notice more particularly the metal object which was met with in the course of the same excavation, and at no great distance from some portion of the bones. Apart from the folding and doubling to which it has been subjected, it is in remarkably good preservation. It is scarcely corroded in any perceptible degree in any visible part, but is as bright as on the day it was consigned to its place of concealment. Neither is it bruised or dented, except where the workman's pick happened to strike; indeed, it is not even scratched. There seems to be no doubt, from the application of tests, that it is brass; whether originally washed with gold is uncertain.

Folded as it is, and displaying barely a fifth of its entire surface to inspection, it is very difficult to form any satisfactory conclusion as to its actual form or original intention. Very possibly it may be a cuirass or breastplate, though its thickness is so moderate as almost to preclude the idea that it was ever intended for actual personal defence in battle. If so intended, it could have been a defence only against comparatively inefficient weapons. The chief ornamentation seems to depend on the effigies of two snakes in strong relief and wrought hollow, with their heads meeting about that part which, if the article were a breastplate, would have covered the umbilical region. The bodies of the snakes slightly descending thence, and diverging, seem then to have taken an upward direction so as to enclose or enfold the central portion of the plate. But these details cannot be ascertained so long as the object remains in its present condition. Besides the snakes, on which the scales are represented by regular series of curved lines carefully engraved, several raised boss-like projections, which themselves, as well as the plate around their bases, are rather elaborately chased or engraved, are observable; and the outlines of certain figures, apparently armed in a fashion rather resembling a Greek soldier's defensive equipment, are visible

* See the notice of the condition of the skulls of oxen, etc., found in a kitchen midden near Carlow, *Gentleman's Magazine*, August, 1864, p. 199. [See Note 18.]

on another part of the surface. Besides these figures and ornaments, other minor ornamental engravings are worked in here and there.

The age, origin, and purpose of this curious article must for the present be regarded as uncertain. On the whole it seems rather to suggest the idea of Oriental workmanship; but until it is more fully exposed to examination it will remain difficult to give a reasonably satisfactory account of it.

But whatever the amount of uncertainty thus indicated, there was yet an observable difference between the relations of this metal object and the matrix in which it lay embedded, and those of the bones and their enveloping matters, which deserves attentive notice. "It lay a foot deep in the gravel," was the remark of the man who described the find to the writer; in other words, it lay in a place relatively different, and surrounded by matters of another kind from those which characterized the great mass of the bones; many of which, however, lay at a very small absolute distance.

This fact leads to the inference that it was deposited under different circumstances, and by an agency of a different kind to that which deposited the bones; that indeed, and almost certainly, it was deliberately buried in a hole dug for the purpose, just where it was found; and the unbattered, and even unscratched condition of its entire visible surface seems amply to confirm the inference. It would almost appear as if it had been folded and doubled for easy carriage and concealment, and in due course hidden in the earth—perhaps under the impression that it was of more costly material than it actually is—and that the depositor had never been enabled to reclaim his supposed treasure from its place of concealment.

The accumulation of 8 to 10 feet of soil over the lowest of these deposits within a period which cannot date very far back beyond the historic, again presents a matter of comparison and study to the geologist.

Further Tumulus-Digging in Cleveland.

[1865, *Part I.*, pp. 16-19.]

In July last year some account was given in the *Gentleman's Magazine** of investigations recently made by the writer; he had already partly explored a large tumulus, or rather such part of it as remained untouched by former diggers, and not without meeting with results; these results he now proceeds to record, together with others, the fruit of further researches. The tumulus in question is one of three lying in a line, and with only the space of a few yards between each two in the group. The peculiar interest attaching to them is that they are in close vicinity to one of the largest and most complete

* *Gentleman's Magazine*, July, 1864, p. 19. [Ante, p. 251.]

groups of ancient habitations in the district hitherto observed. Unhappily all three of them, as well as a fourth, which lies about 400 yards more to the east, have been subjected to merciless and repeated disturbance, and it was with no great expectation of a successful issue to his labours that the writer proceeded to search the southern and eastern flank of the central one of the three houses. Its diameter is scarcely less than 55 feet, and its central height cannot have been less, prior to modern invasion, than 8 feet. It is overgrown by long ling, and a good deal of moss among its roots. But still, a little close examination reveals the presence of the encircling—or rather encompassing—basal stones, yet in their places almost all round. A trench of some 5 feet in width, and apparently carried down to the level of the moor, had been driven right through the hill in a direction from north-east by east to south-west by west, with the result, as the writer believes, of simply discovering that a still earlier investigation about the central portion had issued in the discovery and destruction of a central deposit; but no particulars were accessible beyond the bare fact that fragments of pottery and calcined bone had been found. The writer's examination was commenced at a point due south of the centre and about 20 feet from it, extending on the western side to the verge of the existing cutting, and carried 10 or 12 feet in the other direction also.

On reaching a depth of 2 feet or so, a flooring of stone, which proved to be only local, was found, below which again was merely accumulated earth down to the level of the moor. However, at a point a little nearer the centre and within a foot of the edge of the cutting, the spade passed through a portion of Celtic pottery which appeared to be doubled or folded in a singularly anomalous way. It required nearly two hours of the most patient, and careful, and minutely gradual work with a fine trowel to make out the nature of the discovered relics without doing material damage; and during the greater part of the process it seemed quite impossible to come to any conclusion that was satisfactory as to the nature and manner of the deposit under hand, except, of course, that it was sepulchral. There was, together with a large quantity of burnt bones, nearly the entire mass of a large urn, yet not simply broken up by superincumbent pressure (as is so often found to be the case), but lying in the most utter confusion, and spread over a larger and more irregularly shaped area than the *débris* of any simply crushed urn could ever be found to occupy. A portion of the bottom, in close contact with two or three pieces of the rim, lay at the north side of the deposit; more of the rim was found a foot to the south, and then another piece of the bottom in contact with portions from the most protuberant portion of the vase, 8 or 10 inches yet further to the south. And they were lying in all directions, some pieces on their concave side, others on the round; some edge uppermost, others obliquely; and in one in-

stance two large pieces from the sides, with the convex parts outwards and lying edge to edge, enclosed in the hollow space between them other two and smaller pieces. The clue to the whole—for it was absolutely clear after the first half-hour's work that the confusion was due to no modern disturbance—was given by the discovery of a singularly minute and delicate incense-cup, with its own proper deposit of incinerated human remains and accompanying flints, in the very centre of the mingled and confused mass of pottery and burnt bone just described. This cup is 1 inch in height and under $1\frac{1}{2}$ inches in greatest diameter, of red ware and scored with lines crossing each other diagonally, but so as to leave a space of $\frac{3}{8}$ of an inch all round, nearest to the bottom, untouched. It was placed, mouth upwards, in the centre of four flints laid east, north, south, and west, and consisting of a very flat leaf-shaped arrow-point, another of the same description, but thicker, a thumb-flint, and some other implement, but all of them coarsely or rudely fashioned and chipped, comparatively with many others found by the writer.

Taking this deposit as it was found, it was impossible to come to any other conclusion save one, namely, that an earlier deposit, the large broken urn and its contents, had been deliberately violated and, to a certain extent, displaced, not to use a stronger mode of expression, to make room for a later interment. And this again raises the question so often before suggested, and more than once touched upon in the present series of papers, "With what motive was such violation and displacement made?" It seems impossible to suppose that when so much reverence for the departed worthies of a family or race existed, as is proved by the care taken in piling these grand tumulus-memorials over their remains, a friend could ever lightly or wantonly desecrate an existing sepulchre and its contents. And if not a friend, then at least a stranger; more likely a victorious foe.

On prosecuting the excavation more to the eastward, the writer met with another interment at the same medium depth from the surface as the last, and, like it also, about 18 feet from the centre. This consisted of an incense-cup of peculiar type, accompanying a deposit of calcined human bones, with a wrought flint at either end of the layer of bones, and a rubbed or polished piece of red haematite, weighing perhaps four ounces, in closer neighbourhood to itself. The cup was most beautifully and elaborately marked, the greatest diameter being $4\frac{1}{4}$ inches, but the aperture of the mouth barely 2 inches. Below the part of greatest diameter is a solid foot of $\frac{1}{4}$ inch in thickness and of $2\frac{1}{2}$ inches across—a feature of very unusual occurrence, if not unique. Round the mouth is a string of zigzags, then a double line; between it and a similar double line, half an inch distant, a series of chevrons, each with a smaller chevron within it; then a wider space, filled in with chevrons, set vertically and close together; then a double line again, and round the bottom a similar

string of zigzags to those round the mouth. This vase, as perfect, must have been exceedingly beautiful, and the presence of the piece of iron-ore (which must have been brought hither from a great distance, and so is not without significance in a secondary interment so near the one last described) is a noteworthy circumstance.

The writer's next exploration was made in a houe of very large dimensions situate on Danby North Moors, and locally known as "Robin Hood's Butt Houe." It is about 95 yards in circuit, and 13 feet from the moor-surface to the existing apex. It was only too evident that it too had been opened about the central portion, but being too lofty to admit of sinking, as usual, from above, a drift had been taken in from the east side, while the labours of the men employed by the writer disclosed the fact that the drift-makers had found the central deposit, which had been placed very near the centre, at a height of about 18 inches above the floor, and protected by a small conical pile of stones, or cairn. What the deposit had been there were left no means of surmising; but one find, made in the looser soil on the east flank of the hill, and which appeared to have been brought out from the interior of the houe, must not be passed over in silence. It consisted of about a hat-full of large slices and flakes of flint, some rough as when stricken off the original nodule, others rudely chipped into form as if for further working, and a few which had been already submitted to such further working. The resemblance between a few of those and the flint implements from the drift is too striking not to be noticed. For instance, there is one which, placed side by side with the engraving on p. 115 of Lyell's "Antiquity of Man," gives one the idea that the drawing might almost have been made from it. The main difference is in the size, the engraving being on the scale of one half, while the flint from Robin Hood's Butt is scarcely half an inch longer than the figure in question.

There was one secondary interment, discovered on the south side of the houe at a depth of nearly 4 feet, and at about 18 or 19 feet from the centre. This was a very splendid urn, with its contents of calcined bone, but unaccompanied by flint or other relics of the past. The diameter of this urn is about 17 to 18 inches at the most protuberant part, and the height 18 inches. The rim is beautifully ornamented with a double series of triangular patches of thong-impressions, separated by two similar impressions passing all round, and dividing the surface of the rim into two not quite equal portions. It is perhaps, on the whole, the finest in the writer's collection.

It seems hard to say that the flints last described may not have a peculiar significance. The writer has never met with such, nor heard of such as met with in any other investigation of a grave-hill, and one would think the resemblance in shape and fashion to

the drift "hatchets" can scarcely be accidental. That the interments in all these Cleveland hills mentioned in these papers are extremely ancient, the writer has no doubt. Possibly the original interments in each case may be even older than he has yet ventured to suggest.

British Villages.

[1865, Part II., pp. 715, 716.]

Amid the crowd of scientific inquirers who aim at ascertaining the processes by which the present structure of the world has been attained, or at reconstructing the various forms of animal life which have existed in early periods, it is only natural that the archæologist should have a place, and that he should attempt to trace the early steps of man himself in his progress from rudeness to civilization.

The inquiries of recent years have done much in this respect, and every well-ascertained fact regarding the condition of the early races of our country, however unimportant by itself, cannot fail to be of interest when added to what is already known.

The *relative* sites of early remains are frequently, by themselves, suggestive of a past condition of things, as may be illustrated by a reference to those which occur in the valley of the Breamish and the Till in Northumberland.

This rich valley is bounded on either side by ranges of hills, on many of which are remains of camps and villages, which we might guess to be marks of an early resident population ; but when we find that one of the Roman ways was carried along the valley, we may be assured that it was for the purpose of enabling the conquerors of the world to act on the tribes who were clustered on the neighbouring hills.

The remains which are yet to be seen at Old Bewick, about the middle of this district, are sufficient to give us an idea of a British tribe as regards its arrangements for defence, for habitation, and for burial.

On the hill of Old Bewick are two camps of a horse-shoe form, each containing several acres, protected by ramparts of great strength, which, on the exposed side, are four in number. Within these camps are a few of the hut-circles on which the wigwams of the people had been erected ; and within and adjoining the easternmost of the two are several rocks, inscribed with those circles and cups which are at present puzzling the antiquarian world. The village or town, however, is marked by clusters of circular foundations on the less exposed slope of the hill below. On the adjoining moor are many cairns of varying size, which mark the graves of the tribe. One of these, surrounded by upright pillars, like those commonly called "Druidical Circles," was recently explored by Mr. Langlands, of Old Bewick, aided by the Rev. William Greenwell, of Durham, and Mr.

John Stuart, Secretary of the Society of Antiquaries of Scotland. It was found to contain several cists, and probably had been a family tomb. The central cist had been opened on a former occasion ; but the other two were found, about 3 feet in length, on the south-west side of the cairn. In one of them an urn appeared, of no great size, and covered with incised lines of varying design. The urn is of the class associated with unburned bodies ; but here no trace of the body was discovered. In the adjoining cist neither urn nor remains of the body was found ; but a careful examination of the yellow subsoil in the bottom of the cist revealed about seventy beads of jet, which no doubt had been buried with some lady of the tribe.

Another British village is placed at Linhope, among the hills, on the opposite side of the valley. It consists of clusters of hut-circles within enclosing walls of stone, having a protected path leading down to the neighbouring stream, while on the adjoining moor are the cairns which mark the burial-ground of the townspeople.

On the summit of Yevering Bell, which rears its lofty head at no great distance, is another great camp, with hut-circles on the shoulder of the hill,* and the population which was gathered around it in earlier days was continued until Saxon times, when Paulinus—as we learn from Bede—was engaged for several days together in baptizing the people in the neighbouring stream of the glen.

Altogether it is not easy to find a district so rich in the memorials of early times, or so likely to yield up valuable results to well-directed research. Some examination has already been made at Linhope by the Berwickshire Club, with the aid of the late Duke of Northumberland ; and we trust that the Society may be yet further encouraged in their useful inquiries.

We may direct attention to extensive groups of remains resembling those just described, one of which occurs on a moor near Kirkmichael in Strathardle, and the other on a moor near the Kirk of Lintrathen. In these cases the cairns and hut-circles appear to be mingled, but no careful examination of the sites has hitherto been made, although it is most desirable that it should be undertaken.—*The Scotsman.*

On British Hill Fortresses.

[1840, Part II., pp. 488, 489.]

The description of the camp of Caractacus, as given by Tacitus, is rather obscure to such readers as have not had the opportunity of inspecting similar military positions. “Tunc montibus arduis, et si qua clementer accedi poterant, in modum valli saxa præstruit.”—“Posteaquam facta testudine, rudes et informes saxorum compages

* *Gentleman's Magazine*, October, 1862, p. 455. [See Note 19.]

distractæ," says the historian, when speaking of the attack. (Annalium, B. xii., c. 33, 35.)

The character of this camp may be understood by examining the remains of one still remaining at Worle, near Weston-super-Mare. The following description is taken from Rutter's "Delineations of North-Western Somersetshire," 1829, p. 53 :

"Worle Hill is an insulated ridge, about three miles long, but not more than a furlong in breadth, and includes a view of not less than thirty churches from its elevated summit. The western end projects into the Bristol Channel, above the town of Weston, and is formed into one of the most remarkable fortifications in England. The length of the space inclosed from the inner rampart on the east, to the point of the hill on the west, is about a quarter of a mile, and the medium breadth is about eighty yards, making an area, as supposed, of fifteen or twenty acres. . . . Before arriving at the outer rampart, seven ditches are sunk across the ridge of the hill, out of which it is probable that the stones were drawn which formed the ramparts; besides which, the whole ground, for a considerable distance in front of the camp, is still covered with loose stones. There are two ramparts, about fifteen feet high from the bottom of the ditch, composed entirely of stones loosely placed, without a blade of grass or plant of any kind; these ramparts, with their corresponding ditches, cross the hill in a part where it is about one hundred yards broad, and then, turning westward, are continued *as far as the security of the station required*; those on the north are soon rendered unnecessary by the rock, which is there precipitous; those on the south are gradually blended into the natural declivity of the hill, which is nearly as steep as the rampart itself, and, like it, is composed of loose stones."

I have marked for *italics* the expressions which correspond with those of Tacitus, whose description could hardly be better illustrated than by the remains at Worle. At the same time, his own words afford a reflex light to the camp, which thus appears to have been of British formation, as Mr. Rutter supposes, but without adverting to the Roman historian.

Yours, etc.

CYDWELL.

I am not aware that any account of the British hill fortress in this neighbourhood [Ilfracombe] has been printed, and therefore venture to send you a brief notice of it.

Hillsborough, or Elsborrow as it is called in old writings, on which it is placed, is a promontory of rock of about 300 feet in height, and a little to the eastward of Ilfracombe, one half of which is defended by the sea; a considerable portion also is an acclivity so steep as to be almost inaccessible; and the remaining part towards the south, where it could be approached, is fortified with a double entrenchment, inclosing perhaps forty acres of land altogether, a space neces-

sary for the support of the cattle that were to be driven into it ; but as is the case in most of these fortresses, it does not appear that water could be procured within its limits, but a spring rises just without, from which, if not guarded by an enemy, it could be procured ; but, indeed, these places were not used as a permanent residence or refuge, but only as a temporary retreat from the attacks of a hostile tribe.

Taking advantage of the deepest part of the indentation of Broadcove, the banks commence there, and run nearly from north-west to south-east, keeping parallel for something more than half their length, when the outer bank diverges from the inner, and, taking a lower line across the hill, thus incloses a triangular space between the two ; and here, nearly at the end of the lines, is the entrance, which presents a remarkable feature, for at the outer bank it makes a return at right angles to its general direction towards the inner, so that an enemy attempting to force an entrance would have to advance with the right side exposed to the men placed to defend it—an arrangement studiously attended to by the Greeks, for, as the warrior carried his shield on his left arm, the right side was almost unguarded.

These banks enable us also to draw a conclusion of another nature, which is, that, shattering and fragile as these rocks of grauwacke would seem to be, they are in reality very durable, since the banks at the north-western end appear to be finished off, and do not present that sharp section which they would have done had any considerable portion of the almost perpendicular rock fallen down in the long period that has elapsed since their formation.

Yours, etc. C. W. L.

Camp in Devonshire.

[1793, Part I., p. 513.]

I wish to hint to that indefatigable historian, Mr. Polwhele, that in the parish of Morley, or Morleigh, in the hundred of Stanborough, there are very elegant remains of a camp, whether Saxon, Danish, or Roman, I cannot at present say ; together with several large tumuli, an authentic account of which I have not been able to discover either by oral tradition or history, Risdon barely mentioning the same. Whether this spot, vulgarly called Stambers, gives name to the hundred, or *vice versa*, I am at a loss to discover. If permission be granted me this summer by the landholder, it is my intention of opening the largest and central barrow : if anything should then be discovered worthy the attention of the antiquary, or Mr. Polwhele, as historian of the County of Devon, they may depend on receiving the same through the channel of the *Gentleman's Magazine*. [See Note 20.]

Yours, etc. JOHN LASKEY.

Aggleston Stone Barrow, the Devil's Night-Cap.

[1767, pp. 169, 170.]

The following account and drawings of a very remarkable monument are desired to be inserted in your next magazine.

I am, Sir, etc. J. H.

This prodigious stone, hardly equalled by any in England, and the greatest piece of antiquity in this county, stands in the north-east extremity of the Isle of Purbeck, in an heath on the east side of Studland Bay, in that parish, on the estate of John Bankes, of Kingston Hall, Esq., about a mile north-west from Studland, and six leagues from the Isle of Wight. It is surrounded on all sides by several little hills, or rising grounds, which form a theatre, except on the east, where they open, and give an agreeable view of part of Pool and Studland Bays, and the Isle of Wight.

The name "Aggleston" seems to be derived from the Saxon *halig*, or *hælig*, *holy*; and *stan*, a *stone*, which is expressive of its ancient superstitious use, for it was, no doubt, a rock-idol* or deity in the "British" age. The country people call it the "Devil's Night-Cap," and have a romantic tradition, that the devil, out of envy, threw it from the Isle of Wight, with a design to have demolished Corf Castle, but it fell short, and dropped here.

It is a red heath, sand, or moorstone, which, though very common over all the heath, does not abound hereabouts, or at least of any bigness. It stands on an high barrow, or tumulus; its present form is that of a pyramid inverted, or an irregular triangle, one of whose sides is placed uppermost, though it is probable it was originally quadrilateral. On the east front it is convex or gibbous, on the west nearly flat. On the top, a ridge or bulge runs its whole length from north to south, whence it slopes away to the east 6 feet, to the west 5. There is a considerable cleft crosses it in the middle from east to west. On the surface are three hollows or cavities, no doubt† rock-basins, in which ravens have bred. The surface is overgrown with heath, and turves have been cut there. All the stone is rough, full of cracks, fissures, and inequalities, and parts into horizontal layers, especially on the east side, and at the ends.

The dimensions may be seen in the draught. The girt or circumference at bottom is 60 feet, in the middle 80, at or near the top, 90. But these measurements, by reason of the inequality of the surface, cannot be very exact. The quarriers compute it contains 407 tuns.

On the top of the barrow lie several stones, one of which contains 16, another 9 tuns. On the sides and bottom a multitude of others,

* See Dr. Borlase's "Antiquities of Cornwall," lib. 3, cap. 3, p. 161.

† *Ibid.*, lib. 3, cap. 2, p. 225, plate 17.

of various sizes, mostly covered with heath, furze, and fern. Some tunns have been broken off, and carried to Pool and Studland, for building. If we consider this, and the detached stones before-mentioned, which were certainly fragments of the great one, separated from it by violence, time, and weather, it must have been a prodigious one indeed, not inferior to the "Tolmen" at Constantine in Cornwall, the measurements of which, in Dr. Borlace, fall short of this, though he makes it contain more tunns.

There is little doubt but that the ancient Britons had skill to lift great weights, and spared no pains to erect such vast rude monuments, many of which are extant at Stonehenge, Abury, in Cornwall, and other parts of the three kingdoms. Yet the enormous bulk of this stone, in its primitive state, may incline one to imagine it to be a natural rock, and that the barrow was formed, by a collection of earth, thrown up round it; or if the barrow be thought too large to be artificial, perhaps the stone might grow here, on a natural hillock, and the earth at top might be removed, and the stone laid bare, to a depth suitable to the use it was designed for, and then the hillock might be shaped into its present regular form.

Yet Silbury Hill in Wiltshire, and many other vast barrows allowed to be artificial, mentioned by Dr. Borlace, Lib. III., c. 8., pp. 205-207, are much larger than this, and are strong evidences of the labour and time bestowed by the ancient Britons, and other nations, on such works.

The etymology of Aggleston and the rock basins on it determine it to be a rock idol, erected in the British age, and the object of their superstitious worship.

The barrow on which this stone stands is very large. Its diameter on top is 60 feet, at bottom it occupies half an acre, and 14 rood of ground. Its slope on the east side, where it is steepest, is 300 feet, the perpendicular height 90 feet. On the north and south it is nearly of an equal height. On the west it is much less steep. It is all covered with heath, furze, and fern. On the top it is concave, worn down by sheep lying there, or by attempts to break off stone. Round the bottom appear traces of a shallow ditch, almost filled up, and covered by heath, etc. About it are several other barrows, of different forms and sizes. On one, a little north from it, called Puckstone, is a stone thrown down 10 feet by 8.

This monument standing in an unfrequented part of the country, and hid by the hills that almost environ it, was scarce known or observed till it lately drew the attention of James Frampton, of Moreton, Esq., who recommended it to the notice of the public, as it deserved.

The "Tolmen" at Constantine is of an oval form; its long diameter, which points due north and south, is 32 feet, its short one 14—6. Its breadth in the middle of the surface, where it is deepest,

from east to west, 18—6. Its circumference 97 feet, and about 60 cross in the middle, and contains 750 tunns.—Dr. Borlase, *ibid.*, l. 3, c. 2, p. 168, Plate II.

[1836, *Part II.*, p. 531.]

In "Hutchins's Dorsetshire," vol. i., p. 342, will be found an account of a large stone on a supposed tumulus, called the "Agglestone." It is situated upon Studland Heath, a wide expanse of waste land south of Poole Harbour. It stands upon the extremity of a ridge pointing eastward, and is of enormous size, sufficient to attract the notice of the most inattentive passer-by. The general notion, according to Hutchins, is that it was an object of Druidical worship, and he derives its name from the Saxon Heilig Stane, or Holy Stone. The stone itself is a *ferruginous-arenaceous* concretion, common to the plastic clay formation, upon which it stands. I have no hesitation in asserting that no human power ever put the Agglestone where it stands. It is evidently a portion of the stratum now washed away. If not actually in its original site, it may have been rolled there by diluvial motion. At all events, not a doubt can exist but that its origin is a natural one, and this by no means militates against the tradition of the holy purposes to which it is said to have been appropriated. Similar instances of portions of destroyed strata capping hillocks are not uncommon, and one extremely like the Agglestone on a larger scale, deserves to be mentioned. In the parish of Frensham in Surrey, at no great distance from the Devil's Punch-bowl, on the Portsmouth Road, are some curious conical mounts, in the green sand formation, called the Devil's Jumps. On the top of one of these rests an enormous mass of the iron sandstone, to which even the Agglestone must yield. It did not escape the observation of Cobbett, who in one of his *Registers*, asked "how a stone as big as a church steeple could ever have found its way there?" In touching on the subject of barrows, I may observe that those on the heathy districts rarely produce anything but charred wood and burnt bones. Two or three were opened some time ago on the heathy land between Christchurch and the New Forest; and I was recently present at the opening of two others in the same neighbourhood. The remains of bones were scanty, and no vestiges of pottery were discovered.

**Ancient Cruciform Mound, and Excavations or Cavities,
recently discovered in St. Margaret's Park,
Herefordshire.**

[1853, *Part II.*, pp. 387-389.]

As evidence of the works of a former people that may yet lay dormant and undiscovered, at all events unrevealed, I send you the accompanying description and sketch, which may possibly tend to

throw some light on the habits and history of the early inhabitants of this country.

They are situate in an extensive wood of nearly a hundred acres, called St. Margaret's Park, in an elevated, undulating, and unfrequented part of the county, approaching to the Black Mountains, about thirteen miles south of Hereford. The wood is about three quarters of a mile in length, from within a quarter of a mile of St. Margaret's Church to within half a mile of that of Bacton, declining gradually from west to east, and partly so to the north and south. The church is on the same ridge or hill, or rather a higher elevation, in a retired and thinly inhabited district, almost unapproachable for want of good roads.

Cruciform Mound.—This is situate about the centre of the wood, its western arm being on the highest ground, and its eastern on the lowest; the other two, the southern and northern, declining a little from the centre. It consists of a longitudinal half-round embankment or earthwork, of the form represented, 15 feet wide at the base, and about 4 feet high, of which the following is a section :

Its extreme length is about 68 yards as marked, and it maintains the shape represented with singular regularity throughout, except where it has been cut through by a temporary roadway in the wood, at *a*. Trees, underwood, and thicket, growing on and surrounding it, render it unobservable and difficult to trace, and he who would do so must have considerable patience. Its existence is known to but few of the inhabitants of this solitary district, chiefly woodmen, and respecting it there is no tradition. An old respectable inhabitant residing within a mile knew not of it; and the late Rev. John Duncumb, a gentleman of considerable research, who resided within two miles and a half of the spot, does not notice it in his "History of Herefordshire." I learn from a workman that about thirty years ago nine large yew-trees were felled that grew around it, one of which was of gigantic size. That it is of considerable antiquity is evident from the decayed stumps of oaks still visible, felled ages ago, together with more recent ones.

Beginning from the top of the sketch, one horizontal line is 20 yards long; the upper shaft is $23\frac{1}{2}$ yards long to the point where it meets the lateral cross, while the remainder of the shaft is $29\frac{1}{2}$ yards long; the lateral portion at the northern extremity (the bottom of the sketch) measures 17 yards, of which $7\frac{1}{2}$ extend westwardly, and only $4\frac{1}{2}$ eastwardly of the shaft. When we come to the lateral cross which stretches east and west, we find that the eastern half is $24\frac{1}{2}$ yards long, while the western is only $12\frac{1}{2}$ yards. The head of this cross is 20 yards in length.

The Cavities.—The first of these is situate about 65 yards to the east of the above, is basin-shaped, with a flat bottom or floor. There

being a slight projection into it at one point interferes with its otherwise complete circular shape. It is about 140 yards in circumference outside ; its average depth about 5 feet, exclusive of mud and decayed vegetable matter ; but where the ground declines to the south-east it is very shallow, and the descent into it is slight at that part, and at the latter is a partial outlet for the water, yet not sufficient to render it perfectly dry, even in summer. It is at present enveloped in bushes, thicket, and rushes, the latter 6 feet high, withies, etc., rendering it almost impenetrable, and unobservable by the casual passenger.

The second cavity is situate about 400 yards south-west, and nearly that distance south of the cross, on the steep southern declivity of the wood. It is oval-shaped, its narrowest diameter in the centre inside about 32 yards. The entrance to it is on the south, where the descent into it is very gentle ; but the bottom or floor being level, or nearly so, so far as could be discerned for rushes, bushes, and dense and rank weeds ; and being excavated on the slope of the wood, the banks increased in height, so that at the back or northern part of the oval basin it was upwards of 20 feet high from the floor to the top. No perceptible risen embankment or mound is to be seen about either of these cavities to show where the superfluous soil was removed to. Supposing it possible that the earth forming the cross was taken from either of these excavations, it would have to ascend, and I find upon calculation that either of the latter would contain in their present state more than eight times the quantity of material composing the cross ; the latter would contain about 172 cubic yards. The stumps of several yews, and young ones growing therefrom, are to be seen in their immediate vicinity.

I learned that some pieces of pottery were dug up in another part of the park, a sight of which I could not obtain ; but, being desirous of seeing the spot where they were found, said to be in a hollow, I discovered this to be a third cavity or ancient excavation, of a circular shape, larger than either of the others, being about 160 yards in circumference outside, and situate in the upper portion of the park, about 280 yards west of the cross, where the wood slopes more abruptly to the east. The western or higher bank of the basin is about 20 feet high or more, gradually lowering to the east, where is a narrow entrance descending slightly into it ; a little to the north and east of this are two other narrow entrances of greater descent. There exists between two of the entrances a risen mound or small embankment, which, as before observed, does not appear at either of the others. An oak of nearly 2 feet diameter is growing in the centre, and at the side are the remains of a short pollard oak about a yard in diameter, hollow, and quite dead.

On surveying either of these hollows or cavities, covered and enveloped as they are in all parts with trees, underwood, decayed and

partially decayed wood and vegetable matter, the accumulation of ages, the attentive observer will not fail to be struck with the symmetry of their form and extent; and it will occur to such that they are works of art formed for some special purpose in ages "lang syne," and probably in connection with the cross mound.

A cruciform earthwork, similar to the above, but not so complete or regular, was described by a gentleman of the name of Moggridge, at the Ludlow Meeting of the Cambrian Archaeological Association in August, 1852, as existing near Margam, Glamorganshire.* Numerous are the relics of antiquity, which I have myself examined in various parts of the kingdom, more especially in Wales and Scotland, in the shape of cromlechs, carnedds, cairns, barrows, pillars, Druidical circles, ovals, etc., etc., and which cannot be viewed without marvel and astonishment at the labours of a primitive age, but nothing approaching in character to this mound have I ever seen or heard of; and however much the hand of time, the spade, and plough, may have obliterated in other countries all trace of such works, if they really existed, here at least they exist undisturbed. Simple earthworks are considered to be the earliest erections of a primitive people, which appears probable; and, although this is of evident antiquity, yet it is questionable whether it is of an age anterior to the introduction of Christianity, of which it is probably a symbol. Anything of a cruciform shape, I believe, did not obtain in any country previous to that era, except as a punishment. I believe the Christians did not adopt the tumuli or barrow system of sepulture; nor do any of the numerous sepulchral erections of this kind approach in form to this peculiar and complicated shape; yet this is possibly an example to the contrary, which I will endeavour to ascertain, with permission of the proprietor. It may be observed, that this particular form is not adapted for a place of worship, for preaching the gospel; still this may have been the case before the erection of churches, or it may have been erected to impress the Christian religion on the minds of the people. That those who erected it were, at that period, the prevailing sect, or, at all events, the strongest, is obvious, as, from the time and number of hands employed in its erection, they would be liable to be interfered with, if not persecuted, as the introducers of a new religion almost invariably were, by the dominant sect. However, this is peculiarly a subject for the consideration of your antiquarian readers.

With regard to the basins or cavities, I perceive in your magazine for August last that cavities somewhat similar exist at Stoke Down, near Chichester, believed by Mr. Saull, who has published an essay on the subject, to be the remains of a British village; but at the meeting of the Archaeological Institute held at the latter city, as appears by your report (p. 183), the Rev. L. V. Harcourt considered

* See *Gentleman's Magazine*, October, 1852, p. 405. [See Note 21.]

they were not adapted for habitation, being "so shaped as to collect the water in their immediate vicinity, and that Cæsar had stated that the Britons lived in houses after the manner of the Gauls."

To whatever purpose the cavities at St. Margaret's were really applied, they are, certainly two of them, admirably adapted for a simple roof of the nature of what in building is termed a "lean-to." They could with facility be prevented from receiving the water in their immediate vicinity, and with equal facility could they be rendered perfectly dry by drainage. Cæsar, I apprehend, may not have visited St. Margaret's. Of that portion of England visited by the Romans what he says may be correct; whilst in other parts, in more backward and uncivilized districts, inhabited possibly by different tribes, other habits might prevail, and they might live in woods, caves, and hollows. A person seeing the mud-constructed dwellings composing some of the villages of Devonshire, would not be correct in saying that such houses generally exist in England.

In some parts of Scotland, especially in the Highlands, houses are numerous without either window or chimney, the door answering the double purpose of letting in the light and out the smoke! The dwelling in which the late Mungo Park was born and reared, with nine other children, was of this description—the farm-house of the family consisting of but one single room, 20 feet by 14—and this is in the Lowlands! and the gudewife of the last surviving brother, the late Mr. John Park (hospitable people, since residing in a comfortable new dwelling), informed the writer of this, that his mother when living was wont to say that "it was the brawest hoose in a' Yarrow." It is now used for agricultural purposes.

Instances are these of habitations exhibiting such want of absolute necessities—with others I need not name—so much at variance with other parts of the same country; imitating, with little improvement, even with the single floor and low entrance, the natural habitation of the cave or cavern, where nature had not provided those requisites (save the one aperture) for the escape of smoke and the admission of light; verifying the adage, that "one-half the world know not how the other half live."

I trust, Mr. Urban, that I have given sufficient description of the works at St. Margaret's to enable you or your antiquarian readers to form an opinion of their origin; and am sorry it has not fallen to the lot of abler hands to describe them.

Yours, etc. THOS. JENKINS.

WALBURY, ESSEX.

[1865, Part II., pp. 760, 761.]

My visit to Bradwell, described in a recent *Gentleman's Magazine*,*

* *Gentleman's Magazine*, October, 1865, p. 403 *et seq.* [This is a Roman station, and will appear in the volume on Roman Archaeology.]

was prefaced by the examination of a very remarkable earthwork, near Sawbridgeworth, to which I was introduced by Mr. Francis Rivers. It is comparatively little known; but it is highly interesting from its position, its extent, and from the depth and magnitude of the vallum. I take, however, this opportunity of directing attention to it in connection with many other ancient fortifications formed on a similar plan, some of which are even more extensive than this. Almost invariably they are set down and spoken of as Roman, but, I think, without due and full consideration. Salmon and Morant both call it Roman; and having thus made up their minds, they bring forward most inconclusive evidence in support of their opinions. The Hon. R. C. Neville also terms it a Roman camp in his "Sepulchra Exposita," p. 47. He gives a report on it made by Mr. Frye, of Saffron Walden, who ascertained that no Roman remains had ever been found there. At the same time, Mr. Frye could not learn that any coins of Cunobeline (as has been asserted) had ever been dug up. Walbury lies about midway between Bishop's Stortford and Sawbridgeworth, upon an eminence overlooking the river Stort. The surrounding ditch is of great depth and width, and is well preserved, except on one side, where it has been filled up for agricultural purposes. On the side facing the Stort are what may be called postern entrances, intended apparently (as Mr. F. Rivers suggested) for cattle and horses to descend to the low ground for water. The extent of ground enclosed is thirty acres.

Walbury is a fine and good example of these fortified places, which, as I before observed, are usually called Roman. It would be easy to cite dozens of instances, but for the present purpose one at hand may suffice. Hasted, in his "History of Kent," writes: "At Oldberry (near Ightham) there are the remains of a very considerable entrenchment, which is, without doubt, of Roman origin. It is of an oval form, and contains within its bounds the space of 137 acres." This may be said to be unusually extensive, but it is clear they all belong to a certain class of fortifications constructed upon one and the same principle. It seems that a consideration of the number of troops required to defend these camps called Roman, has never entered into the minds of those who have so termed them. Such places would be mere traps in which weak garrisons could be taken at any time by a strong besieging force; and, situated as most of these earthworks are, it is difficult to understand what strategic purpose they would have answered in the hands of Romans. Hod Hill, in Dorsetshire, is an interesting exception, but that is not of Roman origin: the Romans used it and drew their camp within it; but at Walbury, Oldbury (near Ightham), and other similar places, we never find the slightest Roman remains, such as are always met with where Roman soldiers were stationed. If we consider these places as British, they can be well understood. They are sufficiently

extensive for a large population, and for the protection also of cattle and horses; in short, I think we may recognise in them British *oppida*; and this view is identical with that of my friend Mr. Charles Warne, who has studied so closely and so successfully the ancient earthworks of Dorsetshire.

In reaching Bradwell from Sawbridgeworth across Essex (after staying a night with Mr. Rivers), I was indebted to the kindness of Mr. Joseph Clarke and Mr. John Barnard for an agreeable drive to Chelmsford.

C. ROACH SMITH.

Remains on the Kentish Downs.

[1838, *Part II.*, p. 308.]

As the farm-servants of W. Nethersole, Esq., were employed in digging chalk from a pit in one of his fields, at West Street, about four miles from Deal, Kent, they opened into a structure which bears evident marks of design and manual labour.

Before the men had noticed anything peculiar they had opened the structure at one side from top to bottom, and what first struck their attention was the large blocks of chalk, which were much more dense and compact than that in which they previously had been digging. They now saw that they had opened a cavity in the chalk which descends perpendicularly from the surface to the depth of between 4 and 5 feet; this was filled with the common mould, and was removed with the greatest care, when the blocks of chalk were observed to be continued all round the interior, so that the cavity must have been built in the manner of a draw-well. Between each stratum of the chalk-blocks was interposed a layer of tile. The dimensions of each block are about 7 inches thick, somewhat wedge-shaped, and varying from 8 inches to 1 foot in breadth and depth.

They are united to each other by mortar, of a clay-colour, which now is less frangible than the chalk. Before the structure was injured, there must have been about twenty square holes in the wall, all of which were filled with mould; they were formed by the blocks of chalk being here and there placed to a distance of 6 or 7 inches from each other, and the hand can be thrust into each for the depth of about 10 inches. These holes give it something of the appearance of the interior of a pigeon-cot.

The cavity is 6 feet in diameter, between 4 and 5 feet deep, and the middle part of the bottom is hollowed out to about 10 inches more. The mould which the cavity contained was carefully examined, and a number of bones were found belonging to the pig, sheep, and rabbit, but not sufficient to form the skeleton of the animals. Besides these, were found some old iron nails, which are oxidized through and through, about 4 inches long, as thick as a little finger, and with very broad heads. Some bits of marble were found, which are

slightly concave on one side, and convex on the other, like fragments of a broken vessel. There were two lumps of Kentish rag, which, although they did not tally, seemed to belong to the same vessel, and must have been much like a utensil once used for grinding corn, if not for the very purpose, called in Scotland a quhairn, and in England a quern.

FINITIMUS.

Ancient Encampment at Knaptoft.

[1787, Part II., p. 657.]

Being lately from home on a little excursion, I fortunately discovered the site of an ancient encampment in the parish of Knaptoft, in Leicestershire, which, to the best of my knowledge, has never been noticed; yet so conspicuous from the adjoining turnpike-road, it is surprising it should have so long escaped the eye of even a less attentive observer. I regretted for a moment that an engagement prevented my stopping to take a nearer view; but my visit being at no great distance from the place, I returned the next morning and sketched a plan, with a survey of the adjacent lands, reducing the admeasurement into geometrical paces. The dimensions may not be perfectly exact for want of proper instruments; but I believe, upon the whole, it is sufficiently accurate. I herewith present you the rough draught, such as it is, taken on the spot; to which I have since added a tomb with an ancient martial trophy of my own composing, designed as a vignette to place thereon the title, which, at the same time, will save your engraver the trouble of forming a better. You will, undoubtedly, expect some account with my private opinion of these curious *vestigia*. To answer this point, you must be satisfied at present with mere conjecture only. It is little more than a fortnight since the discovery, and, after many inquiries, I could gain no intelligence, or any tradition, from the neighbourhood respecting it. The proprietor of the ground himself was as deficient as the rest, and totally ignorant in these matters. The only material information from him that served my purpose was that some years ago, in digging a pit, the labourers brought up a large flat stone (but no inscription), and several others of a rude form. This, with some other particulars then related, assured me of its having been the place of interment of some warrior.

Similar sepulchres are frequently found, whose sides, formed by irregular stones, are covered with a large flat stone. One of the kind was lately found at Market-Bosworth, with this difference, that the cover was made of burnt clay. These sort of tumuli I have endeavoured to represent in the corner of the plan. From this, and other appearances, I dare not pronounce the premises a Roman military work, rather British or Saxon, perhaps a Danish entrenchment. Its situation from either the Fosse or Watling Street does not

seem to favour the first conjecture. It is distant ten miles south from Leicester, about seven miles east from the Watling Street, nine miles south from the Fosse, and about the midway between Leicester and Naseby in Northamptonshire. I wish for the opinions of your antiquarian readers, to throw some farther light on this curious and long-neglected remain. However, I am not a little flattered by having luckily made the first discovery, and shall be more so if you judge it worth displaying in your useful repository. In the meanwhile, if anything new can be collected relating to this place, I shall take an early opportunity of communicating it.

References to the plan. [See Pl. II.]

- A, the camp.
- B, the trench, or line of circumvallation.
- C, the principal entrenchment or fortress.
- D, a raised mount, not above 8 feet high, supposed to have been considerably lowered by the plough.
- E, a pond having a constant spring.
- F, the place of the tumulus.
- G, the turn-pike road, from Leicester to London, through Wel-ford.

Yours, etc. OBSERVATOR.

[1787, Part II., pp. 1059, 1060.]

I find, in p. 657, an account of an encampment in Leicestershire, the discovery of which seems to have afforded your correspondent very singular satisfaction. My visit to this place was about two months after that of "Observator." I compared his account and plan with the site of the encampment, and quickly perceived that had he been less elated with the discovery, his accounts would have been far more accurate and faithful. The true figure of the encampment is rather an *isosceles* than a *scalenum*. The pond is quite out of its place, and the stream represented as running from it, is, I imagine, like the vignette, intended for an embellishment; no stream, nor channel of a stream, being visible. The pond is *not* fed by a perpetual stream; the proprietor has often remembered it dry. The eastern limit of the encampment is delineated as a straight line; it ought to have been a compound curve. The western side is *not* parallel with the London road, as exhibited in the plan; it diverges very sensibly towards the southern extremity of the supposed camp. The distances of this place from others, mentioned by "Observator," are far from accurate. The mount could never have been lowered by the plough. Of the effects of a plough, either on or near the mount, there is not the least vestige discoverable. This, at least, "Observator" might have learned from those of whom he complains that they were unable to satisfy his inquiries concerning the history

of the place. I have often thought that an antiquary never appears to such advantage as when his information is scanty and incomplete. And it must be confessed that the circumstances of "Observator" were, on this account, highly advantageous. He tells us he had no hint to follow, no tradition to inform him, nor popular tale to found a conjecture upon. At last he was told that in digging a pit within the enclosure, a flat stone, with others of a rude form, without any inscription, had been found. From these very slender data, "Observator" "was assured" that some warrior was there interred. It is painful to me to inform that gentleman, as, I doubt not, it will be to him to be informed, that the said flat stone was *not* found within the entrenchment, but at a distance from it. However, if, in lieu of the said flat stone, with which "Observator" had no business, the following intelligence be in any degree serviceable to him, he is heartily welcome to it. The land on which is the site of the supposed encampment anciently belonged to the Knights Hospitallers of Jerusalem; and, at the distance of about a mile and half from that land, "Observator" may have the pleasure of viewing another encampment and tumulus, whenever he is disposed to revisit that part of Leicestershire. They lie in the parish of Husband's Bosworth. But I hope that if "Observator" favours you with any future plans or accounts, either of this or other ancient places, he will learn to be more accurate and more faithful than in that which has occasioned these remarks of

ACADEMICUS LEICESTRIENSIS.

Encampments in Leicestershire.

[1788, Part II., p. 688.]

If it be any satisfaction to you to have a further account of the encampment and tumulus near Husband's Bosworth in Leicestershire, mentioned in Vol. lvii., p. 1059, I am happy to lay before you my observations made on the spot. Explanation :

B. Three sides of a parallelogram, of which the two long sides measure each 65 yards 3 inches; the shorter side measures 36 yards. The three sides are formed by large mounds of earth; no fosse appears; the earth must have been carried from a distance.

C. Another bank or mound, 17 yards in length, without any fosse; part in, and part without, the parallelogram.

D. A mount about 3 feet high, the base 25 yards; at the distance from the parallelogram between 60 and 70 yards north.

F. Another bank or mound, 11 yards 2 feet 9 inches in length; at the distance of 1 yard from the mount.

The distance from Leicester, south-south-east, is 14 miles; from Naseby 6 miles.

ACADEMICUS LEICESTRIENSIS.

Beacon at Ranby, Lincolnshire.

[1789, *Part II.*, p. 626.]

I send you the dimensions of one of the most perfect beacons I remember to have seen. It is situated in the parish of Ranby, near Market Stainton, in Lincolnshire, on the highest part of the west side of the Wolds, and commands a prospect to Lincoln of about 18 miles. It is of a pyramidal form, on a base of 100 feet square (the north side of which corresponds exactly with the point of the magnetical needle), gradually diminishing to a square of 20 feet at the top. The perpendicular height is about 16 feet. It is within an hundred yards of the road (by some called "street," an evidence of a Roman way), from Barton to Horncastle (the Banovallum Romanorum). On the same road, in a north-west direction, are two other beacons, which, being planted thick with trees, cannot be so well measured, one in the parish of South Willingham, the other called Bully Hill, in the parish of Kirmond. All the three appear to be at convenient distances to repeat signals, which would be visible at a great distance on the west side of the Wolds.

X. Y. Z.

Earthwork at Laceby, Lincolnshire.

[1832, *Part II.*, pp. 407-409.]

The honourable labours of our British antiquaries since the Reformation have brought to light many facts illustrative of the habits, domestic as well as military, of the aboriginal inhabitants of this island, and its consecutive invaders, by the examination of existing monuments belonging to each particular period, from the simple mound of earth thrown up by the unsophisticated Briton, through all the gradations of systematic improvement, to the stately Norman castle erected with an equal attention to durability and magnificence. But as, while the mountain oak displays its giant form to every passer-by, the humble lily of the valley blooms in its native dell unseen, so antiquity, though lavish of her unwieldly treasures she spreads them freely before her admirers for the exercise of taste and ingenuity, in her seclusion boasts of many hidden stores, which remain concealed till accident or keen research shall rescue them from oblivion.

I have been led to these observations by the discovery of an earth-work, which I believe has been wholly unnoticed by antiquaries, although situate in the immediate vicinity of a Roman road leading from Louth to the north of Lincolnshire, and about half a mile from the village of Laceby, near Grimsby. This road generally forms a boundary to parishes; and there is little doubt but it was used by the Romans, although there are some reasons for believing that it existed before the irruption of Cæsar, in the form of a British trackway.

Along its course is a series of entrenchments and tumuli, and Roman coins have been found at different periods upon or near it. Adjoining this road is a lofty eminence called Welbeck Hill, which has been increased in altitude by the erection of an artificial mound on its summit ; and hence it commands an extensive prospect in every direction. At its foot is the earthwork or fortification I have referred to. It is surrounded by a broad and deep fosse, with high embankments on each side, and constructed with the utmost regularity, and with an accurate regard to the cardinal points of the compass. Its form is an oblong square of the following dimensions, with openings or entrances north and south ; and at every angle a bastion, as represented in the figure. The length within the ramparts is 440 feet ; breadth 185 feet, height of the banks, 13 feet ; breadth of the inner bank, 14 feet, and of the outer, 15 feet ; of the ditch, 29 feet ; and of the entrances, north and south, 66 feet ; the inner squares at the angles about 30 by 25 feet, on two of which facing the south, which is the accessible quarter from Welbeck Hill, are high mounds. The ditch, in the eastern division, is still brimful of water, and from its great depth is impassable without a boat.

Now the question is, for what purpose was it originally intended ? The country people have a tradition that a gentleman, many years ago, threw up these banks as the site of a mansion, but proceeded no further than the foundations. This, however, is altogether improbable, for it is the most unlikely spot in nature to be chosen for such an edifice. It possesses no prospect in any direction ; even its proximity to the Roman road would present no view of it to the passenger ; and none but a hermit or a misanthrope would condemn himself to the utter seclusion of such a solitary abode, in the vicinity of unwholesome swamps and quagmires. Was it then intended for a military earthwork ? As an exploratory camp, it would enjoy the double advantage of privacy and convenience. If a watch station were established on the summit of Welbeck Hill, the extensive prospect over the whole country would afford the sentinel a view of the approach of any hostile force at a considerable distance, and by a timely notice to all stragglers to retire into the camp, no vestiges would remain of the existence of an army in this situation ; and it might either lie snug in the encampment, or fall suddenly on the enemy as he passed along the road, as prudence might suggest. In this point of view the camp would be amply capable of accommodating about 840 men, allowing the whole breadth of the entrance north and south to be appropriated as a principal street ; for a single tent for eight men, with sufficient space for stabling and other conveniences, would occupy about 300 square feet ; i.e., 12 by 25. This calculation would allow considerable room for the officers' tents, and 20 feet all round the ramparts, for the convenience of action, if attacked. It appears to have been a place of uncommon strength ; embosomed in a secret

valley, within a short distance of which is a narrow and deep ravine overhung with brushwood that runs through the country to a considerable distance, and terminates in a wood called Irby Holme, where are the remains of what has doubtless been a cavern or hiding-place in time of danger. With this in view, may not the camp have been used as a place of security for cattle and baggage, women and children, sick and wounded? Nothing could be better contrived for the combined purposes of security and seclusion from public notice than this retired spot, which is hid from the view by an amphitheatre of hills, until the visitor arrives within a few yards of the place.

Near this entrenchment is a remarkable spring called Welbeck, which is uniformly dry during the winter season; but in the month of February or March, a loud rumbling noise is heard in the ground for several successive days, and at length the water bursts forth in a hundred places, with such incredible force as to fill in a few hours the whole area of the well or inclosure of earth where it is situated, which is a paralellorped of 50 yards long by 45 yards wide, and 2 yards deep; and then entering into a natural channel, it forms a rapid stream during the summer, that falls into the river Freshney; and their united waters are emptied into the sea at Grimsby. When this spring breaks, several others of smaller dimensions in the immediate neighbourhood, which appear to be subject to the same laws and influence, burst forth at the same time; and being together exhausted about the month of October, they cease and remain dry until the reservoir beneath the surface is again surcharged by the rains and snows of winter.

GEO. OLIVER.

Marston Trussel Entrenchment.

[1801, *Part II.*, p. 689.]

The inclosed (plate 1) is a plan and view of an ancient entrenchment in the wood of Marston Trussel (County Northampton). It is situated on a hill, which is at that part very steep, and in form much resembling a large angular rampart or bastion, on the extreme point of which there is a circular mount 50 yards in diameter, and surrounded by a trench about 18 feet deep. From this trench there extend two others of equal depth along the side of the hills, and in length about 56 yards. These are united at their extremities by a trench of 140 yards long and somewhat curved, which gives the whole work an appearance not unlike that of a fan. Through this latter, or cross trench, there appear to have been two entrances, one near the centre, and the other near to the south-west corner. The ground inclosed within these trenches, exclusive of the mount, is called the castle yard; and in the north-west corner there is a circular hole in the ground, which appears to have been formerly a well. Although it has generally been supposed to have been a castle, there are no

vestiges of any well or building to confirm that opinion ; and, as a camp, it is entirely cut off from all communication with the country adjacent. The hills on each side are steep, and considerably higher than the top of the mount ; the ground also on the south rises gradually above the entrenchment. Whether it served the purpose of a camp, or castle, or both, no situation can be more secret and retired, since it is so completely environed with hills and wood, that no one can expect to meet with a work of the kind until they arrive close to it ; it must, however, on this account, have been less eligible for defence, and, from its confined prospect, very liable to a surprise ; but it is most probable that its warlike tenants kept watch on the adjoining hills, which command a view at once beautiful and extensive.

The wood takes its name from Marston, but this military work lies in a small part of it which is in the lordship of Sibbertoft. From the former town it is distant $1\frac{1}{2}$ miles to the south, and from the latter 1 mile to the north-east.

Yours, etc. T. C. R.

British Villages in Northumberland.

[1825, *Part II.*, p. 420.]

On a fishing excursion a few years ago to the river Brewish, at the foot of Greenshawhill, the lowest of the range of the Cheviots near to Linhope, in the parish of Ingram, Northumberland, I discovered the remains and foundations of circular houses, and two circles occasionally united, as mentioned by Dion Cassius, and by Strabo, in his description of "British Villages." It had been defended on the side next to Greenshawhill by two deep fosses and a high rampart, and had been so extensive that nearly two miles of stone walls have been built from the ruins, whilst many large stones yet remain in the foundations, the masons having found it impracticable to remove them.

The village is situated about 5 miles above the Roman station, at Crawley Tower, upon the same river, which is most probably the "Alanna Amnes" of Richard of Cirencester, who mentions six principal towns belonging to the Mactæ : viz., Bremenium, Ottadenia, Gadenia, Selgovia, Novantia, and Damnia : the sites of only two of which have been noticed, viz., Rochester and Howick, by General Roy.

A third, I am confident, is situated east of North Charlton, close upon the north road, about 8 miles north of Alnwick, where, last spring, in removing the materials of a large cairn to mend the turnpike road, was found the skeleton of a very large man with a brass spear-head, inclosed in four stones, with a large cover. This mode of sepulture took place after the introduction of Christianity.

J. SMART.

Remarks on Cole and Pen, in Somersetshire.

[1786, *Part I.*, pp. 485, 486.]

Reading in the last Monthly Review a critique on the seventh volume of the "Archæologia," I met with Mr. Barrington's account of Cole's pits in Berkshire, with an intimation of others of like kind in this county. Having on a particular occasion lately visited the most remarkable pits of that kind hereabouts, I am induced to give you my observations thereon, to be inserted, when convenient, in your entertaining miscellany.

These excavations, which are called pen-pits, are situated about a quarter of a mile south-east of the parish church of Penselwood in this county, in a common, or waste piece of land, of about 200 acres, the soil of which seems uniformly to be a gravelly clay; its vegetable produce, a little grass, much moss, fern, furze, and a few thorns. These pits are in general of the form which mathematicians call the frustum of a cone, inverted: not of like size one with another, but from 10 to 50 feet over at top, and from 5 to 20 in the bottom, the slant depth from 5 to 10 feet; not arranged in any regular order; though at some places I could perceive a chain of eight or ten, connected with each other, the bank of partition being of less elevation than the others around. The distance from pit to pit is but few feet.

To make a calculation of the number of these pits, I would suppose that each, on an average, contained 20 square feet of land; from whence it would be found that this common contained not less than 22,000. Besides which, are many others in the adjoining lands; in the whole, I dare venture to suppose, a hundred times as many as at Coxwell.

Whether these spots (Cole and Pen) were cities, or were encampments for soldiery in former wars, I must leave to the determination of Mr. Barrington and others; but, if they were the former, Cole cuts a diminutive figure when compared with Pen.

I would remark to you that on an eminence, about a mile north of these pits, is the spot where the brave Alfred gained the glorious and final victory over his enemies the Danes. To notice a little the history of those times, we find that Alfred was overcome in battle at Chippenham, in Wilts, and that he took refuge in an obscure part of Somersetshire, accessible only in the summer months, about thirty miles west of Penselwood, and that the Danes pitched their camp not far from these pits. Now, if I may venture to hazard an opinion on a subject so much involved in the darkness of antiquity, it would be that these excavations were the work of Danish soldiers, at the period mentioned, for their common encampment; and that the grand camp for their chiefs and officers was on the eminence above mentioned, perhaps of different construction. A supposition also is not

void of probability, that Alfred approached the upper camp from the forest of Selwood on the north, and took it by surprise ; after which the conquest of the soldiery themselves was less difficult. Alfred's visit to these parts gave him sufficient knowledge of the most vulnerable part of the enemy ; and surely without a knowledge of some favourable part to attack, he never would have hazarded the lives of the few faithful subjects he had collected against an enemy so numerous as this seems to have been. [See Note 22.]

Yours, etc. A. CROCKER.

Ancient Entrenchment in Yorkshire.

[1789, *Part II.*, p. 688.]

In a farm, part of the estate of Henry Duncombe, Esq., and near his seat at Copgrove, in the West Riding of Yorkshire, are the remains of an ancient entrenchment, which may be traced near half a mile in length, consisting of one line, forming several angles. About 300 yards south of this line is another entrenchment, enclosing an area 66 feet square, in the centre of which is a small elevation.

In ploughing the ground near these works, very lately, was found a small piece of brass, the size of the drawing (plate iii., fig. 4), and about the thickness of a crown-piece. Could we ascertain to whom this bearing properly belonged, perhaps it would throw a light on the history of these entrenchments, with regard to which even tradition is silent.

Fig. 5 is the head of the bolt of a catapulta. It is of brass, 5 inches long, and $1\frac{3}{4}$ inches broad at the edge, and weighs 8 ounces. This curious fragment of an ancient weapon, now in the possession of Dr. Hutchinson, of Knaresborough, was found on turning up the soil in the year 1788, in a field about 400 yards below the old spa at High Harrowgate.

Yours, etc. E. H. R.

On the Laws or Duns of Scotland.

[1832, *Part II.*, pp. 221-223.]

Little mounts, or conical-shaped hills, so frequently seen in Scotland, and most commonly found situated in the vicinity of ancient castles and churches, are objects of curiosity as connected with ancient manners.

They are generally termed "laws," and sometimes "duns," and were the "Moot" or "Dom-hills" of former ages, where justice was administered and the laws enforced. Here all matters of right and equity were determined; courts of justice being held in the open air, even until late times. In the Isle of Man, the Parliament, or Folk-mote, is still held on the Tynewald; and about four miles from Tavistock is a hill called Croken-Tor, where the courts of Stannary are

obliged by charter to assemble, although the steward generally adjourns the meeting to the neighbouring town.

The term "law" is the Gothic "hleau," lex, the Icelandic and Norwegian "laga." "Moidh," "moot," and "mote," in the Gaelic, Saxon, and Swedish languages, signify a place of meeting, a court; and hence the Irish "mota," a mount.* "Dun" is a Gaelic word, and implies an artificial hill or fortress.

These mounts are common in almost every district in Scotland. In Dumfriesshire they abound, and perhaps many tumuli now supposed to be sepulchral, have been originally court-hills. Although most commonly artificial, natural eminences were also sometimes chosen for holding the moot. Of this description are the laws of Dunse, North Berwick, Cockburn Law, etc.

The mote of Urr, evidently artificial, in the county of Kirkcudbright, about half a mile from the parish church, is an imposing example of one of those hills; but the most noted is that of Scone, situated about 70 yards north of the palace. The first mention of this hill is in the reign of Kenneth the Second, who from thence is said to have promulgated the celebrated Mac Alpin Laws, about 850. In 909 a council was held here by King Constantine and Bishop Kellach, who, with those then present, solemnly vowed to observe the laws and discipline of faith, the rights of the churches, and of the Gospel. From this circumstance the mount was called "Collis credulitatis."[†]

Skene, in his "Regiam Majestatum," tells us how Malcolm the Second, seated in the famous chair, placed on this mount, bestowed lands on his followers. Robert the Second, also, the day after his coronation, sat "super montem de Scone."[‡]

On the west side of the cathedral of Old Aberdeen, is a hill called Tillidron, which appears to imply in Gaelic "the hill of right."§ William Orem, in his "Description of the Chanonyry of Aberdeen," written about 1725, informs us that this mount was also known by the name of Don-i-don, or rather Dun-ä-don, which in the same language signifies "the Dun of the Don," on the bank of which river it is situated.

These were popular appellations, probably imposed at a very early period; for, after the establishment of the bishopric, it became the

* Lhuyd's "Archæo. Brit."

† "Leges disciplinasque fidei, atque jura ecclesiarum, evangeliorumque, pariter cum Scottis in colle credulitatis, prope regalem civitatem Scoan devoverunt custodiri. Ab hoc die collis hoc nomen meruit, i.e. Collis credulitatis."—"Chron. Pict. ap. Innes," and Pinkerton's "Intro." ii. 181.

‡ Fordun, and MS. in Paper Office, quoted by Pinkerton in "Hist. of the Stuarts."

§ Lhuyd's "Archæo. Brit." Dronain, a throne; Drong, a company; Dronadh, direction; Dronan, the back.

moot-hill of the diocese, and was dedicated to St. Thomas the Martyr.

In 1382 Adam de Tyningham, who was then bishop, held his court “super montem St. Thomæ martiris, juxta Canoniam de Aberdon.”* A canon of the Scottish Church having prohibited the holding of courts in churches, they were transferred to adjoining eminences, natural or artificial.†

There is a tradition that it was frequently enjoined on those who had subjected themselves to ecclesiastical censure, as a penance, to carry a certain quantity of earth to these hills. It was equally necessary to take means for the preservation of the moothill of antiquity, as it is to keep in repair modern courts of justice, and this seems to have been a becoming plan. Hume, in his “History of the Douglasses,” says that on the coronation of Robert the First, in 1306, the Barons demonstrated their fealty, and did homage, by casting on the hill of Scone a quantity of earth from their lands, from which circumstance it obtained the appellation of “Omnisterra.”

In 1511 King James the Fourth confirmed a charter to John Stewart, son of the Earl of Lennox, of the lands and barony of Tarbolton, and ordained the hall situated upon the court hill to be the “principal messuage thereof, where the seasing shall be taken.”—(Harl. MS. 4134.)

The hills of Dunipace, near the river Carron, in Stirlingshire, are very remarkable, and the name is sufficiently indicative of the use to which they have been appropriated, whether we suppose it, with Sir J. Foulis, in the “Transactions of S. A. Sc.,” Dun-na-bas, “the hill of death or judgment;” or compounded of the Gaelic “dun” and Latin “pacis,” a conjunction not unfrequently to be met with.‡

Adjoining the churchyards of Kintore and Inverurie, both in Aberdeenshire, are similar artificial elevations. The latter is denominated the Bass, a word of similar import with the name of Dunipace.

The right of holding moot courts was not dependant on actual possession; for, although the lands might be alienated, the original proprietor retained the right of assembling his vassals, and exercising his prerogative as chief of the clan, on the Law-hill of the domain.

When Malcolm the Second granted lands to his followers, as above-mentioned, it is added that he reserved to himself the royal dignity, and the “Moot-hill” of Scone, from which it would appear, as Pennant observes, that its possession affected the dignity of the Crown, which tenaciously retained the right of presiding on the hill of assemblage. In a charter of David Earl of Strathern and Caithness,

* “Chartulary of Aberdeen ap. Caled.” i. 737.

† “The Scottish Gaél,” vol. ii., c. vii.

‡ This originated with the monkish writers, who often Latinised names in an arbitrary and whimsical manner, as may be seen in ancient documents. In an account of the progress of King Edward the First, published in “Rot. Scotia,” they are spelt “Donypas.”

granted in 1380, and quoted in Chalmers's "Caledonia," i. 737, is this reservation : " *Salvis nobis et heredibus nostris Cathedra comitis, et loco domus capitalis dicte terre de Fyndon.*"

Sometimes these hills are distinguished by "Ward," which is generally prefixed, as Ward-hill. This word is most probably the Saxon wyrth, "fatum, fortuna,"* a term very applicable to a place where laws were enacted, and sentences promulgated. The Slogan of the Maxwells was, "I bid ye bide Wardlaw."[†]

Circles are almost exclusively referred to Druidical uses, but they were also devoted to other purposes, one of which was similar to the design of the Laws. In 1380 Alexander Steuart, Lord of Badenoch, held a court of regality " *apud le standand stanes de la Rath de Kingusie.*"[‡] The Raich is still known, but the stones are gone. In Icelandic those monuments are called Domhring, circles of justice ; and Domthing, courts of judgment.

Elevated situations seem to present the most eligible places for the transaction of solemn and important affairs. The Court of Areopagus, the sovereign tribunal of the Greeks, to whose solemn decrees the gods themselves were deemed subject, was held on an open eminence in the City of Athens.

" Mountains are altars rais'd to God, by hands
Omnipotent, and man must worship there ;
On their aspiring summits glad he stands,
And near to heaven."

Hills have been always venerated by primitive nations, who have viewed them as the peculiar habitation of Gods, Genii, and Spirits. In Scotland the fairies dwelt under the little green hills ; and long after the Baron had ceased to legislate from the summit, those airy inhabitants of the interior continued to influence the minds of the people. The practice may be discontinued, but it is still well remembered, that when any of the Laird's tenants were contentious, he appointed them to meet him on the summit of a hill, where he settled the dispute.

On such hills was generally a remarkable stone, beside which the conference was held, and it is not unreasonable to suppose the obelisks often seen near churches were sometimes intended for civil, as well as religious purposes.

Stones have been appropriated to religious and juridical purposes by most primitive nations, but it would be digressing from the object of this essay to enter more into the subject.

Such customs are now disused ; but old men in Scotland will yet tell how they formerly lent and repaid money, concluded bargains,

* Lye's "Dict. Sax."

† Quære—implying a severity of revenge ?

‡ "Chart. Aberdon. ap. Caled." ut sup.

etc., beside certain noted stones, silent witnesses of the good faith or dishonour of the parties.

The word "Doom" is not yet obsolete—it still signifies fate or judgment; and giving sentence in Scots law was formerly called "passing the doeme," the Judge was denominated the Doomster or Dempster, and the jury the Doomsmen.* In the Isle of Man the Judges are still called the Deemsters. [See Note 23.]

Yours, etc. JAMES LOGAN.

Gallery of Stones in Forfarshire.

[1840, Part II, pp. 79, 80.]

I send you a sketch of a curious building found underground on the property of Mr. Murray, of Lintrose, in the parish of Kettins, near Cupar Angus, in the County of Forfar.

From B at the surface of the ground there is a slope of about 3 feet to C, the entrance to the building, having rude stone posts. The floor still slopes to D about 3 feet more, from which point to A it is level; it is paved with large rude stones, and the distance from A to B is about 17 yards. At E a fire place, where charcoal was found, with three rude stones by way of fender. A, a small square hole in the end wall, apparently the mouth of a drain. The walls are built of large unhewn stones; are about 3 or 4 feet in perpendicular height, above which an arch springs as at figure F, which may be supposed to have been completed as in G. The building is at the top of a gently rising ground in a field where a man was ploughing, and was discovered by his plough striking against a large stone, which proved to be on the top of one of the walls. It was completely filled up with a black loamy soil, different from that in the surrounding field. A few pieces of decayed bones were found, but they were so small as to be insufficient to indicate what bones they were. Nothing else was discovered in the excavated soil. There are the remains of several Roman stations in the neighbourhood, particularly at Campmoor, within the distance of half a mile.

A. T.

Diggings into Ancient Britain.

[1862, Part II, p. 695.]

Consecutive explorations of an unusual character have been made during the summers of the last and present years in the Cheviot district. On these lofty hills, which are sealed for so many months of the year with snow, a veritable tract of ancient Britain has been laid bare: a walled town, several fortlets, scattered hut-circles and tumuli have been disengaged of the earth that has been accumulating over them for nearly two thousand years; and many interesting facts

* See a curious tract entitled "Manner of holding Justice Courts in Scotland." Cott. MS. Calig. B. viii. 212; also Galba, E. ix.

have been thus disclosed respecting the Celtic tribes whom Caesar found in possession of the land. It would appear that the Cheviot hills were well populated in those remote times. Huge circles of masonry overgrown with herbage are seen on most of them, sometimes on the slopes, sometimes on the summits, and within many of these there are smaller circles of turf-covered stones marking sites of huts. In all these ramparts and dwellings blocks of the porphyry of the district have been used as the sole building material.

On the southern slope of a hill, locally distinguished as Greenlaw, great masses of ruin promised a rich reward to the spade of the excavator. Here three walled enclosures, connected with one another by a roadway, have been brought to light. Within these enclosures traces of as many as seventy stone huts can be counted. Most of the entrances into these face the east, and the floors of those that have been dug into are found to have been rudely flagged with flat stones. The largest of the enclosures has been strengthened with two ramparts : against the inner of these walls is a hut which has a flue —the earliest evidence of the use of chimneys we possess. In several of the huts charred wood was found in the floors, as well as broken pottery ; in one a glass bead, in another a stone seat, in others a fragment of a glass armlet, part of the horn of the red deer, and three bottom stones of hand-mills. The Celtic remains on Broughlow, Chesters, and Ingram Hill have also been examined. The most recent diggings have been made on Yeavering Bell, of which we have already printed a detailed account.*

Mounds of Earth near Pontneddfychan.

[1801, *Part II.*, p. 985.]

The banks of the Neath River, above the village of Pontneddfychan (usually spelt Pontneathvaughan), near Neath, in Glamorganshire, for near a mile in length, and about half a mile in width, on each side, contain a great number of mounds of earth and stones, of about 2 or 3 yards long, 1 wide, and 1 high ; and some few of about 4 or 5 yards long, 1 or 2 wide, and 1 high. They all appear of great antiquity. They lie pretty nearly in straight lines up the ascents of the ground, with their sides opposite thereto and to each other (Plate II.). Their distances from each other are various ; in some cases only 3 or 4, and in others more than 20 yards. Their numbers on each side of the river must have been several hundreds ; but of late years they have been greatly diminished by levelling them for the purpose of facilitating the ploughing of the lands. These mounds are evidently artificial, an excavation on the upper side of each, from whence the matter was got to form them, is still visible. It is not likely that they have been the effect of quarrying, or even trying for

* *Gentleman's Magazine*, September, 1862, p. 454. [See *ante*, p. 264.]
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stones, because they are situated in the most earthy parts, and in the midst of grounds whose surface is in many places almost covered with stones that are detached from the rocks, and, in course, might have been removed at a less expense, and with greater facility, than in the opening of new quarries. Several stones are also contained in the mounds themselves, which would not have been the case if quarrying had been their only object. It is not probable that they have been the effect of any mining adventure, because the rock itself is not a mineral measure.*

The Neath River, on which they are situated, here divides Glamorganshire and Brecknockshire, the banks of which are nearly perpendicular, and from 2 to 300 feet high. Just below the village of Pontneathvaughan the Neath and Felddta (usually spelt Velthta) Rivers unite ; and there Cwmm Nedd (Neath Valley) is not more than a quarter of a mile in width, the lands on each side rising by degrees until they terminate in lofty mountains. A large stone, of a rude oblong-square form, 8 feet long and about 2½ feet square, lies upon the ground near to the mounds on the Glamorganshire side, and may at some time probably have been erect. The Glamorganshire side of the Neath River belongs to Lord Vernon ; and the Brecknockshire side to Walter Jeffreys, Esq., of Brecknock.

To the north of these mounds, at about three miles' distance, there is a Roman causeway, called in Welsh "Sarn Helen," or Helen's Pavement, on which there are the remains of a station, and to the north-east, at Ystradfeldhta, about four miles' distance, there are the remains of another Roman station ; and, about a mile farther, a third.

Are these mounds (for it is evident they have been erected for defence), therefore, Roman or British? Probably some of your correspondents, versed in ancient history, will be able to trace out by whom they were erected.

In the road to Merthyr Tidfil, at about a mile from these mounds, there is a bridge called in Welsh "Pont Dinas," or City Bridge. I am informed that the ancient Britons generally called their encampments Dinas or Caer, both of which words signify a city. This serves in some measure to confirm the idea of the mounds having been a military station ; and Pont Dinas may have derived its name from having been erected for the purpose of keeping up a communication between the encampment and Monmouthshire, as well as the south-east parts of Glamorganshire, that bridge being the only passage from those parts over the river above Neath.

GILBERT GILPIN.

* The miner's term for all matter under which minerals are usually found.

Llanbadarn Fawr, in Cardiganshire.

[1791, *Part I.*, p. 116.]

There are several old British camps or forts in this parish. Peny Dinas, near Aberystwyth, a very large entrenchment; Y Gaer, near Cwmbwa, Pen y Darren; a fort near Bwa Drain; and Llys Arthur, in Dyffryn Castell; Llys Arthur signifies Arthur's palace, and hath only a single ditch, and is on a plain surrounded with high mountains. They have several stories in this neighbourhood about Arthur's residing here. The four first being great ditches thrown up on the tops of hills. Two earns on the top of Plymlymon mountain which are very large heaps of loose stones. Some earns in Trefeirig, said to be burying-places. The above forts are said to be the Caers or camps of the ancient Britons; and the two earns on the top of Plymlymon mountain might possibly be formerly used as beacons, to give notice of an approaching enemy by burning fire on the tops of these earns, which might be seen from nine or ten counties.

The blade of a British spear or pike, called ffonwayw, was found about five years ago, in a bog on the side of the mountain of Plymlymon; it is two-edged, and about 10 inches long, having been nailed in a slit in the end of a wooden handle; it is of yellow brass of the form here described (Plate I., fig. 6); and the nails are of brass. It is in my custody.

WILLIAM OWEN.

Remains of the Aboriginal Inhabitants of Ireland.

[1865, *Part I.*, pp. 707-710.]

In the summer of 1864, Colonel A. Lane Fox, F.S.A., and Richard Caulfield, Esq., F.S.A., made an investigation of some remains of the aboriginal inhabitants of Ireland still existing in the neighbourhood of Cork; and on March 9 of the present year, the latter gentleman gave some account of their researches, at a meeting of the Bandon Young Men's Society (the Right Hon. the Earl of Bandon in the chair). As the subject is a new one, and may prove to be the opening of a promising field of investigation, we present an outline of the lecture:

"If," said Mr. Caulfield, "I were asked what were the most ancient remains now existing in Ireland, I would certainly point out those earthworks which are so thickly scattered through some parts of the country, and known among the peasants by the name of Forts or Raths; many of these curious remains are now fast disappearing before the progress of railways, others have been sacrificed by the industrious and improving agriculturist. The supernatural agency which was supposed to lurk about them, and which for ages, like a guardian angel, preserved them, is fast losing its influence. And may I be permitted here to lift up my voice on their behalf, and request

of those gentlemen on whose property they may exist, that when not absolutely necessary for some great and permanent benefit, the hand of man will spare those and other landmarks of ages perhaps for ever lost in the night of time? Last summer, in company with Col. Lane Fox, F.S.A., I had an opportunity of examining many of these remains, and after considerable difficulty in some instances, we got into the crypts and made accurate measurements and drawings of the subterranean chambers; from these investigations we came to the conclusion that there are, or where the earth has fallen in, were, crypts in all of them. The entrance into some was about the centre, into others from outside of the circumvallation, of which there are frequently two, and sometimes the remains of a third. They are mostly round, but occasionally one of square form is to be met with. A rath has been defined to be 'an ancient fortress of the Irish chiefs,' and is a very interesting specimen of certain Celtic modes of living. The rath, like the British *oppidum* described by Cæsar, was a large circular enclosure on elevated ground, and not unfrequently in the bosom of woods.

"About the beginning of May, having got permission from Horace Townsend, Esq., we turned our attention to one of the most interesting and perfect forts in this part of the county. About three miles north of Blarney is a fort called Lis-na-ratha; it is 95 paces* in diameter between the foot of the interior slope, and 21 feet from the crest of the parapet to the bottom of the ditch. The ditch was 34 feet wide, and the crest of the parapet is 11 feet high above the level of the interior. It has two openings, one to the south, the other to the north-east; it commands the country round it, and especially to the south and west. For two days we employed a strong labourer in making soundings by picking the ground with a long bar to the depth of 4 or 6 feet, but were rather unsuccessful, our labours being only rewarded by the discovery of a small earthen chamber 2 feet 10 inches below the surface, and the bottom of it 5 feet 9 inches, in which spot an iron clinker was found. The chamber appeared to be 2 feet wide at the part where it formed an arch. Among the débris was a quantity of charcoal and small fragments of bones, which had evidently been broken up. Mr. Galton tells us that some of the tribes of Africa, not content with the flesh of the animals which they kill, pound up also the bones in mortars, and then suck out the animal juices contained in them; so also, according to Leems, the Danish Laplanders used to break up with a mallet all the bones which contained any fat or marrow, and then boil them until all the

* A pace is 2 feet 6 inches. Cashel fort, near Inishannon, county Cork, is perhaps the largest in Ireland; it is of oval form and in two lines, the outer being 900 feet by 1,140 feet; the inner line is at a distance of 150 feet from the outer, which is quite exceptional. This fort is on the crest of a high hill, and commands the country for miles around.

fat was abstracted. A similar custom would seem to have prevailed here.

"Before quitting the locality I must not forget to notice the remains of what has all the appearance of having been once what is called a Druidical circle. About a quarter of a mile east of the fort are two large stones called Dallauns, erect in a field ; one was 9, the other 11 feet high, and 9 feet 9 inches apart. We dug to a depth of about 6 feet between these stones, but found no animal remains. On examining the immediate locality we found twelve others, some much larger, lying on the ground, partly buried in the boggy soil of the place ; here were also two tumuli rising from the ground, 21 paces apart. These were excavated to the depth of 6 feet. The entire substrata was composed of burned stones and pieces of charcoal. These tumuli are common to all nations. In the annual report of the Smithsonian Institute (Washington, 1857), M. Guest, in an interesting article on 'Ancient Indian Remains,' says, 'On opening the tumuli they were found to be composed of earth, charcoal, ashes, and contained human bones, horns and skulls of the deer, bones of the beaver,' etc. The mode of cooking adopted by those rude people, and which appears common to all nations in their infancy, was by heating a quantity of stones, and placing them upon the flesh or fish till half baked, and which they subsisted on.

"We next proceeded to the lands of Garraune, in the parish of Donoughmore, the estate of Jonas Stawell, Esq., who kindly permitted us to make any researches in the forts on his lands. The first fort we examined was called by the country people Luchlanic, or Luhulig ; they say that this word in the old Irish tongue signifies 'the Danes,' giving some colour to the popular but erroneous impression that these earthworks were raised by that people ; measured as Lis-na-ratha, Luchlanic is 57 paces in diameter, the ditch is 36 feet wide, and an outer parapet without a ditch 15 feet wide. We found no crypt in Luchlanic. Quite adjacent to it is a small fort called Lis-Dubh, or the Black Fort. It was so thickly covered over with brushwood, that it defied our picks and spades. At a distance it looked like a dark spot in the beautifully rich and verdant fields that surrounded it. We next visited Lis-Ard, or the High Fort. This rath stands up boldly from the ground, and is a conspicuous object all round that part of the country. It is 23 paces in diameter, interior slope 15 feet, exterior slope 24 feet measured along the slopes, which are at an angle of about 45°. Another fort, called Jack Dick's Fort, is near Mr. Stawell's farm. It is 51 paces in diameter. A very massive pillar-stone with an Ogham inscription stands just outside the gap on the north side. Further on is Lis-Anisky, or the Water Fort ; it is surrounded with a deep moat full of water. This fort has been thickly planted, which has a pleasing effect. A brook flows at a short distance from Lis-Anisky, immediately opposite which is an ancient

well called Tubber Lachteen, or the well of Lachteen, containing a beautiful spring continually bubbling up. Smith says St. Lachteen was the patron saint of Donoughmore. In the 'Martyrology of Donegal,' a calendar of the saints of Ireland, Lachteen is mentioned at July 26; there is another of the same name, May 1. Dr. Reeves, one of the learned editors of this 'Martyrology,' considers the 1st of August the most probable day.

"Not far from this locality we were pointed out the site of some subterranean chambers of a different nature, called by the country people "Poul-fe-tallif," which signifies a "hole under the ground." One on the grounds of Mr. Stawell; another in a field north of the well, but separated from it by the high-road. Mr. Stawell kindly got some of his workmen to open the one on his farm; it was a crypt covered with large flags, but as the entrance was discovered a few days before, the labourers partly filled it with the stones collected from the field. On entering it we found a rude chamber constructed of loose stones, without any cement, kept in position by the immense flags that form the roof; it was 5 feet 3 inches in depth; at the base of the wall, facing south, was a small passage about 1 foot 8 inches square, leading into a little oval cell, about 2 feet broad, in which were two small pillars of water-worn stones. Whether they communicated with any other crypt we were not able to ascertain. The one north of the well, however, afforded a better opportunity for examination; it was entered on one side of a broad earthen ditch by a small aperture which led into an apartment 9 feet by 3 feet 4 inches, and 4 feet high, similarly constructed; on the west was a narrow passage 6 feet by 1 foot 4 inches; they did not appear to lead further; on the east was another small passage covered with flags 3 feet 6 inches by 1 foot 6 inches, and 1 foot 2 inches in height, which we ascertained led into some other recess which we found on the other side of the ditch; it was covered with very large flags, insomuch that it took five men with bars to remove one of them so as to allow a small passage for the body to get through; here we found a similar chamber, 9 feet 8 inches by 3 feet 2 inches, and 5 feet in height. We explored another about a mile from this place. The chambers in the last two were oval in form. These all possessed the same characteristics, and were evidently constructed by the same people. There was no appearance of a mound having ever existed over them. The country people possessed no traditions respecting them; if they were places of sepulture no traces of burial remained. Several conjectures were made as to their use, such as cells for hermits, hiding-places for treasure, etc., but no satisfactory conclusion could be come at. In the mountain of Garrane is also a very interesting stone circle and fort on the slope of Knockencragh; there is also a cave. Giraldus Cambrensis appears to have been one of the earliest foreigners who mentions fortifications constructed by the Northmen in Ireland; but

that the forts were in existence many centuries before the arrival of the Northmen in this country can be proved from the fact of their being mentioned in the very early Irish annals.

"We next turned our attention to the examination of the floors of some caves that came occasionally under our observation. This inquiry was mainly suggested by the discoveries lately made in certain of the caves in France, where, on digging into the floor, large quantities of breccias, flint-core, and bones of various animals have been found, showing that these places once constituted the wild habitations of some barbarous tribes of the human family. We did not, of course, expect to reap so rich a harvest as Messrs. Christie and Lartet have in the caves of Les Eyzies, where the floor is overlaid with a continuous sheet of breccia, composed of a base of cinders and ashes, mingled with charcoal, fragments of bones, etc., forming one consolidated mass undisturbed since the period of their deposition.

On the 21st of June we made a minute examination of the caves at the Ovens. On entering the cave we first penetrated the passage leading to the right, and dug into the ground in several places. Some branches were so low that we had to creep into them. The floor of this part of the cave we found to consist of stalactite, on breaking through which we found several bones and some vertebræ in sequence; these bones were firmly imbedded in the stalactite floor. On examination they turned out to be the bones of the wolf, the boar, and some human remains. We next turned our course towards the main branch, and after wading about a furlong through a tortuous passage, with water varying from 2 to 3 feet deep and a muddy bottom, we eventually arrived at a large square chamber, like the passage, a natural excavation in the limestone rock. One side of this chamber was particularly smooth and well shaped, but the whole was covered with soot, and bore evident marks of having been at some time subjected to the action of fire, and on which were the *graffiamentos* of former visitors. In the centre of this chamber is a square pile of stones about 4 feet high, some of them large and water-worn, on the top a large flag. Around this structure we dug, and about a foot beneath the surface we found bones mixed with charcoal and lime deposits, probably formed from the dropping of the roof; we also found a mussel-shell among the *débris*. That this cave was inhabited at a remote period there can from these evidences be no doubt, and by a tribe of savages similar as to their mode of living, in all probability, to those which dwelt in the caves in France. On the right, before you enter the chamber, is a beautiful spring well in a natural basin of the rock; it appears to be of some depth. On each side of the main branch were other passages leading off, but on this occasion we did not consider it prudent to enter any of them.

"Before concluding this subject I may observe that it is not un-

usual to find an ancient church within the precincts of a rath. A few years ago on digging a grave in the churchyard of Dunbullogue, about four miles north of Cork, a crypt was discovered, which on excavating a few days after, I was rewarded by finding two bee-hive compartments, connected by a low passage. I could just stand up in the chambers, which were very regularly constructed of small stones placed endways in some kind of cement like soft earth ; a long passage covered with flags ran upon a westerly direction from the inner chamber, which may originally have been the entrance ; the ruins of the church stood just over the crypt. The Church of Kilbrogan in this town was built on the site of one of these forts, and was the first church built in Ireland for Protestant worship."

Dundugan Fort, in the County of Louth, in Ireland.

[1752, p. 319.]

This uncommon fort is encompassed with three wet concentric fosses, which communicate with the river Dundugan, as represented in the plan. Great part of the central mount, the fort having been long destroyed, has been cut away to form a new channel for the river, which is always very deep, and subject, during the floods, which are very frequent, to overflow all the adjacent pasture and meadow-ground, so as to form a considerable lake for several months, especially in the winter season.

Buried House in Ireland.

[1841, Part II., pp. 413, 414.]

An underground house has been discovered near the old road leading from Newbliss to Monaghan, and about three miles from the latter town, and from its perfect state of preservation forms a very curious relic. A man who lately got possession of the farm upon which it is situated, went to remove an unsightly hillock in a small meadow close to his house. This little field had been reclaimed a few years ago, after the turf had been cut off it, and from it to the small lake of Keselin (about 300 yards below it) was, in the memory of an old man living near it, one continued heath moor, with several spades' deep of turf under it ; and he had seen seven spades of turf cut off the hillock which formed the roof of the house. The outer wall is 46 feet by about 16. Outside the entrance is a semicircular court-yard ; the base of the wall surrounding it, as well as that of all the other walls, is composed of large rough stones, some of them several tons weight, standing on their ends, something like those of Stonehenge. The entrance divided the semicircular wall into two equal segments, and was formed with two larger stones than the others, sufficiently apart to admit a man with ease. Inside the entrance was an oval apartment, about 12 feet by 8, which was

arched over from within about 4 feet of the base. The arch was composed of flat stones of different sizes, so carefully selected and fitted that the point of a penknife could scarcely be inserted between them. Each stone projected about a quarter of an inch from the underneath one until they met at the top of the roof, which was about 6 feet from the ground. Opposite the entrance, at the other end of the room, was a similar entrance into a lobby, which led straight to the other extremity of the building, and off which were six other apartments, all square, and built and roofed in the same manner as the first oval one. The two standing stones, forming the entrance from this latter room into the corridor, stood somewhat narrower than those of the principal entrance, and were rubbed and worn at one particular part, as it were from the weapons of the inhabitants returning from their hunting or plundering excursions. The whole of the floor inside was flagged with slabs of the same stone, and the outside of the roof covered with the same material, which is the most remarkable circumstance connected with it, as the nearest freestone quarry is on Carronmore mountain, in Fermanagh, about twenty miles from this place, and the stone there does not cleave into slabs, and is of quite a different grain, the former exactly resembling the Scotch sandstone found along the Clyde. The interior was found perfectly clean, with the exception of the juice of the bog-stuff covering it having trickled down the walls. From the number of what are called in the south of Ireland "follah feah" (deer fire), it may be concluded that this edifice had been the abode of hunters, and that the turf-mould was first excavated in order to build it, and then laid back again for the purpose of concealment. The particulars of another house found in a bog, in the County Down, are published in the 28th volume of *Archæologia*, with engravings from drawings by Lieutenant Mudge.



Notes.





N O T E S.

1 (page 4). In connection with this communication it is worth while quoting the following valuable communication, printed in 1862, Part II., pp. 142-149: *Traces of the Early Britons in the Neighbourhood of Oxford*. A Lecture read before the Oxford Architectural and Historical Society, March 18, 1862. See *Gentleman's Magazine*, May, 1862, p. 576. In this lecture Mr. Dawkins, after referring to the great abundance of materials for the study of archæology in the neighbourhood, so that it was impossible to walk out without meeting with some vestiges of antiquity, proceeded to describe the various excavations which had been made a year or more ago in the village of Standlake, near Witney. The series of circles which had been disclosed he considered to be of an early British period. He minutely described, therefore, the circumstances attending their discovery, and the remains found in them. He took one of these as typical of the rest, which especially contained an *ustrinum*, or place where bodies had been burnt. He also described the urns, of which he had two very beautiful specimens, which Dr. Wilson, President of Trinity College, had kindly brought with him to lay before the meeting. Other relics were incidentally mentioned, such as a bronze ring, an arrow-head of calcined flint, etc.

Such being the cemetery of the early race, he then described in the same manner the dwelling-places and the remains which were found also in them, such, e.g., as a small iron link (the only metal-work) and some bone implements, and large quantities of pottery. There was also a mass of conglomerate, which was so shaped as to serve as a scoop, and with this probably these early pits had been excavated. Besides these there was a large quantity of bones of animals, which had hitherto been only loosely described as bones of pig, ox, etc., but which he considered were deserving of attention, as by them much light would be thrown upon the habits of this early people. He said :

"I have been able to identify the following : The horn-cores, teeth, and long bones of *bos longifrons*, the small short-horned ox; the upper and lower jaws of a large species of dog; the jaws and teeth of sheep; a portion of the lower jaw of a colt; the upper jaw of a red or fallow deer; the lower jaw of a pig or boar, and the lower jaw of a cat; the metacarpal of a roe-deer has been polished, and probably was worn as a pendant, as there are marks of the friction of a string upon it near one of its ends. The evidence relative to the mode of life of this early race afforded by the remains of animals is by no means unimportant. For to pass over the short-horned ox, which is now not only extinct in England, but in the whole of Europe, and the dog, which will be subsequently discussed, the presence of a cat, the guardian of the hearth, as Mr. Wylie terms it, enables us to make a curious induction. Assuming that the habits of Pussy have always remained the same, her repugnance to a change of locality was the same then as now, and her masters must have had, to a certain extent, fixed habitations. Again, from it the

presence of mice or rats can be justly inferred ; for in early stages of society it is highly improbable that a useless pet would be tolerated, and it is a well-known zoological law that the relations between a flesh-eater and its prey remain constant. The bones of mice were found. Again, to carry the chain of argument still further, the presence of mice implies the presence of edibles—corn, or roots, or nuts. In all probability it was corn that attracted these vermin ; for that this early race had cereals is proved by the ear of corn which Hoare found underneath an early British tumulus near Warminster. The lake-dwellings of Switzerland have furnished traces of barley, wheat, nuts, beech mast, and even seeds of raspberries. Mr. Stone, indeed, thinks that some of the circular pits at Standlake, without a passage cut in the side, indicate that they were made for the purpose of containing stores. Thus the cat's jaw indicates that these aborigines had fixed dwellings, that they were plagued by mice or rats, and that they had storehouses.

"The fragments of pottery found, both in the cemeteries and the abodes, are of the rudest workmanship and of the coarsest material. All the patterns are either rude impressions of a finger-nail or stick, or of parallel lines drawn at various angles to one another, and in the main making vandykes. None of them were baked in a kiln, but after being rudely fashioned by the hand out of the clay, were hardened in the fire. It is of the same type as that found by Sir R. Colt Hoare in the tumuli of Wiltshire. And though at first sight no possible connection can be seen between the burial-mounds of Wilts and the cemeteries marked out by a trench at Standlake, which are not raised above the level of the ground, and though articles of gold and other material of comparatively good workmanship have been found in the former and none in the latter, both are of the same age ; the one being raised over the chiefs and their families, the other being the resting-place of the common people. We have indeed only to step into a churchyard to see a similar difference, flowing from a similar cause, between the tombs of the wealthy and the graves of the poor, the former remaining through centuries, the latter in a few years' time sinking down to the level of the ground, and leaving no trace of their position on the surface. Yet in both alike, on close examination, the disturbed earth will after a long lapse of time indicate the burial, and the grass will be greener and more rank than the surrounding soil. On the field of Sedgemoor the bodies of the common soldiers were collected together and buried under a mound, and though the plough has long since eradicated all traces of a mound, the rank dark-green grass still marks the place. Not being satisfied that it was an infallible sign, some few years ago I investigated the spot, and at a depth of about 2 feet found human bones. Thus the dark-tinted grass is a more lasting memorial than many which man places to mark the resting-place of his dead."

Mr. Dawkins then described the burial-ground which he had discovered in the railway cutting at Yarnton :

"In May, 1861, while on a geological excursion, I had an opportunity of exploring a section of the rising ground near Yarnton, Oxford, in the cutting of the Witney Railway, close to its junction with the main Oxford, Worcester, and Wolverhampton line. There were two distinct layers visible, the lower one composed of water-worn pebbles of the neighbouring rocks, of quartz from the Lickey hill, and of granite from Charnwood Forest ; the greater number, however, were from the lower oolitic limestones of the district. The Oxford clay also, upon which it is based, has contributed its characteristic belemnites—*B. Owenii*—all more or less water-worn and broken, and its own oysters, which being much stronger than the belemnites, are in many cases uninjured. In this, as in the rest of the low-level gravels of the valley of the Evenlode, and Isis, and Cherwell, remains of the elephant (teeth and tusks), rhinoceros, ox, horse, etc., have been found ; which indicates clearly that the mammoth and its extinct and living congeners lived either immediately before or during the time that this bed of shingle was thrown up by the sea, which then filled the vales of the Thames and its tributaries.

"On the summit of this gravel-bed is a black layer of earth, varying considerably in thickness, from 5 feet to a few inches, with the junction line by no means

uniform. Here and there are deep indentations, where the black earth had, as it were, encroached upon the gravel below. As we examined this layer, walking westwards, we found innumerable pieces of pottery, rude and half baked, together with bones and teeth of various animals—of the horse, ox, deer, sheep, dog, and pig. All the bones were broken, and the teeth were in the main separate from the jaws. The only jaw which we found perfect was the lower jaw of a dog. These remains became more abundant as we advanced westward, and the black layer became thicker, until, at the extreme end of the cutting, it excluded the gravel altogether from view. About 10 yards from this spot, and at a depth of 1 foot, we discovered a skeleton, which was buried in a sitting posture, with the face turned to the S.E., or S.S.E. A complete section of it had been made in digging the embankment, and I obtained only the bones of one side—the rest having been carried away in the soil removed in making the cutting. There were numerous pieces of angular flint here, as in other parts of the black layer. On further examination we found a circular piece of bronze and a small tag-like instrument, also of bronze. These were the only traces of metal which we discovered. In November last, Mr. Dobbs and myself were fortunate enough to find another skeleton, quite perfect, which was buried at full length; the skull is now in the osteological series of the New Museum.

"Some three or four years ago, while excavations were being made to obtain gravel for the embankment of the Oxford, Worcester, and Wolverhampton line, a considerable number of urns and human remains was discovered about a quarter of a mile to the east of the spot under consideration. Unfortunately, all the skeletons and bones have been lost, or scattered among private collections; and of the urns one only has found its way to its proper resting-place, the collection of the Ashmolean Society. This, I am informed, at the time of its discovery contained a smaller one, which has disappeared. It was found at a depth of 8 feet from the surface, near the south side of the gravel-pit, which is now to a great extent filled up and obliterated by the plough. The pieces of pottery scattered about the ploughed lands indicate that the burial-grounds of this early race of men were of considerable extent in this locality.

"But what inference can we draw from the above data of the age of this burial-ground? Who were the ancient people whose remains were found here? and what deductions can we draw as to their habits, culture, and modes of life? The evidence as to these points afforded by an inquiry into the remains both of man and of the other animals, the mode of interment, and the description of pottery associated with the remains, will, I apprehend, give us a very fair notion of the relative date of the people to whom this cemetery belonged, and give us an outline of their customs and manners. All the hollow bones were broken, that the marrow might be abstracted, while the solid bones were in all cases whole. None of them belonged to old animals. Thus the jaws and teeth of the sheep indicated, in the main, a creature about a year and a half old, and certainly not exceeding two years. The remains of the other animals indicate an age approximating to that of the sheep. The fragmentary condition of the bones is easily accountable for on the supposition that the friends held a funeral feast, similar to those in Ireland, at which they ate and drank for their own pleasure and the honour of the deceased; and that they buried the bones in the grave with the remains of their departed friend. They must, indeed, have been to a certain degree epicures; for the bones indicate that they preferred young meat to old—veal to beef, and lamb to mutton; while the boars' remains show a decided preference for a young porker over an old one. The teeth-marks on one of the bones of *bos longifrons* indicate that it had been gnawed by some animal; and coupling this together with the presence of a dog's jaw, it may justly be inferred that dogs were present at the feast. It is highly probable that the custom which Caesar mentions as prevailing among the Gauls also prevailed in Britain at this period,—'Omnia quæ vivis cordi fuisse arbitrantur in ignem inferunt, etiam animalia'; and hence the presence of the remains of a dog among the relics of the feast. This hypothesis is rendered very

probable from the great esteem in which British dogs were held by the Romans. Strabo, indeed, mentions hounds—‘canes ad venandum aptissimi’—as being exported from Britain to Rome. In a parallel case at Ercley, in Wiltshire, Sir Richard Colt Hoare infers that the grave was one of a hunter.

“Thus much light does a consideration of the bones throw upon the funeral ceremonies; but much more light is thrown by it upon the mode of life of the people themselves. As the remains of the dog and roe-deer imply that a people situated in a country where wild game abounded were addicted to hunting, so do the remains of the sheep, and possibly of the ox, point to pastoral habits. Sheep, indeed, have never been found in a wild state, and so long have they been domesticated that the stock from which they sprang is not yet discovered. But of all the animal remains the most remarkable are those of *bos longifrons*—the small short-horned ox. Here, as at Standlake, we find this extinct creature associated with the remains of man; and there can be no possible doubt of the aborigines possessing large herds of this animal. In all early British tombs where the bones of animals found have been properly examined, this contemporary of the Irish elk has been found. There is no evidence of its having existed long after the Romans landed. In the peat-mosses of England, Ireland, and the Continent, its remains are frequently met with, associated in many cases with stone and bronze weapons, and canoes, which in lieu of a better term are called Celtic or Ancient British. Why should it have become extinct? Professor Owen thinks that the herds of newly conquered regions would be derived from the already domesticated cattle of the Roman colonists—of those *boves nostri*, for example, by which Cæsar endeavoured to convey to his countrymen an idea of the stupendous and formidable *uri* of the Hercynian forests. For my part, I believe that the Roman colonists introduced their *boves nostri*. And if this was superior to the indigenous breed, as it probably was, the foreign race would gradually supplant the native, until at last the latter would either be extinct, or to be found only in mountain fastnesses, whither some of the aborigines retreated with their herds. The kyloes of the Highlands of Scotland, and the runts, indeed, are remarkable for their small size, and are characterized by short horns, as in the *bos longifrons*, or by the entire absence of these weapons. These races would of course be modified by the gradual admixture of other blood. I have never heard of a well-authenticated instance of *bos longifrons* being found in any burial-place except in a British or Celtic, though, indeed, it possibly may have been found in some few of the early Romano-British period, at some of the outposts of Roman habits, civilization, and agriculture. If this be true, the *bos longifrons* may be viewed as the characteristic fossil of the Celtic period, and one which stamps the era of this burial-ground as surely as a given fossil stamps the position and relative age of a given stratum of rock. On visiting Mr. Akerman lately, he told me that he had never detected *bos longifrons* in a Romano-British or Anglo-Saxon tumulus, and that he thought my theory was probably correct. Another kind of ox also became extinct at this period, the *bos primigenius*, which began to exist at the time of the mammoth, cave-bear, and rhinoceros. Such is the evidence which osteology affords, when applied to the relics of the British grave-feast. It enables us, I believe, to look upon the *bos longifrons* as the characteristic fossil of the period.

“The evidence afforded about the date of the burial by the position in which the skeletons were found, is by no means conclusive. The Wiltshire barrows seem to prove that three modes of burial prevailed simultaneously in Britain; for in some the primary interment consists of a vase filled with calcined human remains, in others, of a body at full length, and in others, a cist with the legs in a bent or kneeling attitude. Of our two skeletons at Yarnton, the one was in a reclining posture, with the legs gathered up; the other buried at full length. The former certainly reminds us of the description of the death of Jacob—‘And when Jacob had made an end of commanding his sons, he gathered his feet up into the bed, and yielded up the ghost.’ The skull of the latter skeleton is highly developed, and indicates an affinity to the Anglo-Saxon race; and possibly, though at present

there is no evidence, the skeletons may have been interred at a later date, amid relics of a much earlier period. At Standlake, indeed, the Anglo-Saxon cemeteries are close to the ancient British villages, and so it may have been in this spot. On the surface we found a piece of pottery, which appears to be Anglo-Saxon.

"The evidence afforded by the pottery is far more conclusive; for it enables us to fix the relative date of the epoch. It does not, indeed, enable us to say how many years, or even how many centuries, have elapsed since the time when the Britons or Celts buried their dead in this spot; but it points to the pre-Roman period, and probably to a remote era of that period. It is of the same workmanship as that found at Standlake, and of a similar pattern. The bronze implements, as at Standlake, point to the bronze age, and probably to a late epoch in it, for at the latter place a fragment of an iron chain was discovered.

"On comparing the human remains from Standlake with those from Yarnton—though in the one case cremation appears to have been the rule, and in the other simple interment—there can be no doubt that they are both of the same date: the same animals, the same pottery, and the same flints point out the fact.

"Roughly-chipped flints, indeed, are characteristic of all the earlier Celtic burial-places; and as they are often rudely broken without any apparent plan, it is probable that they were connected with some religious feeling or rite. They sometimes form a pavement above the primary interment, and sometimes are heaped up above it. In the Channel Islands the layer of flints was represented by a layer of limpet-shells. Perhaps the same ideas which caused the Thracians to kill the chief concubine and chief steward of the dead king caused these ancient Britons to bury with their dead, beside his weapon and ornaments, the crude material with which to make them in the spirit-world. I know of no more curious or more interesting subject than that of flints. Supposing that we had no traces of an early flint-using people, ignorant of the metals, the evidence that an early, if not the earliest, race made use of flint alone for all their implements can easily be deduced. Certain rites and ceremonies become engrailed into a religion, and become part and parcel of it; and thus old customs become preserved from a religious feeling, when otherwise altogether obsolete or superseded. Religious habits are the last to yield to innovation. Now if we turn to Livy, we find that the Roman Feticial, M. Valerius, immediately before the conflict between the Horatii and Curiatii, bound the Roman people to abide by its decision by sacrificing with a sharp flint,—'Id ubi dixit, porcum saxo silice percussit' (Livy, i. 24). Hannibal also consummated his vow of eternal enmity to Rome by sacrificing with a sharp flint. If we examine the process of embalming among the Egyptians, we find that they cut open the side of the dead body with a sharp Ethiopian flint. Or again, if we turn to the Pentateuch, we find that the rite of circumcision was performed with a sharp flint. And in all these cases the use of flint had come to be part of the religious ceremony, and points back to a remote period, when, in the absence of metals, flint was the material out of which all the cutting instruments were formed.

"The vandyke patterns on the pottery both of Yarnton and of Standlake bear a striking resemblance to some of that discovered around the pile-dwellings in the lakes of Switzerland; and more particularly to that of the bronze period. We cannot expect the patterns to have been identical in places so far apart as Britain and Switzerland, but in both the zigzag ornament is made on the same plan, and in both alike there is an absence of curved lines. One vase, indeed, discovered in the Lake of Neuchâtel, exhibits almost the exact pattern of a piece from Standlake; while another (No. 1, Plate XIII. of M. Troyon's 'Habitations Lacustres des temps Anciens et Modernes') resembles most strongly a fragment which I found at Yarnton. The remains of the same animals indicate the same habits—the dog, the cat, ox, sheep, and deer. If this comparison be correct, we have a standard by which to compare our relics, and can form a fair idea of the civilization and culture of this early race. We can mark off the *pfahlbauten* of Switzerland, and many of the tumuli on the Downs of Wiltshire, and the relics at

Yanton and Standlake, as being of the same relative date, and as belonging to the bronze age, or, more properly, to the transition between the bronze and iron.

" In conclusion, I will only add, that there is sufficient evidence to prove that our ancient British reliques in this district are of the same relative age as those of the tumuli of Wilts and of the *pfahlbauten* of the bronze age in Switzerland. And I think that it is highly probable that *bos longifrons* is the characteristic fossil of the period, and that it will be found to enable us to differentiate pre-Roman from Romano-British cemeteries and dwellings.

" N.B.—Since the above has been in type, I have examined some more bones from Standlake, and to the list of animals found there must add the marten and the water-rat. It is very probable that many of the so-called mice-bones may turn out, on close examination, to belong to the latter animal."

2 (page 18). On the question of wolves in England, Mr. Harting's *Extinct British Animals* should be consulted ; and there is a useful note in Mr. Croft's splendid edition of Sir Thomas Elliot's *The Boke named the Gouvernour*, vol. i., pp. 192, 193. Mr. Hazlitt's edition of Blount's *Tenures* does not throw light upon the query suggested in the text.

3 (page 21). There are the three following descriptions of caves which I did not think should appear in the text, but they may well be given in the Notes.

[1817, Part II, p. 272.]

A cavern of considerable extent has been discovered at Spaxton, near Bridgewater. It was visited lately by several scientific persons, who experienced some difficulty in making their way to the principal chamber ; but they were agreeably compensated for their trouble by the effect produced from their lights on the pendulous incrustations of carbonate of lime, which embossed its roof and sides. Some specimens were brought away ; but the owner of the spot has properly determined to preserve it in its present state, as a pleasing object of curiosity.

[1770, p. 536.]

Having lately passed through part of the North of Scotland, I was invited, among other curiosities, to view the dropping Cove, as it is called, at Slaines.

This natural curiosity is in that country looked upon as one of the wonders of the world ; and indeed it is the most horrible cavern I ever beheld. We were four in number, and accompanied by two servants with flambeaux, who conducted us down a rugged and dangerous precipice to the entrance of the mouth of the cavern, which I own to you I passed with no little fear. When we were entered, the astonishing height of the hollow rock struck such a gloom as cannot be described. When I looked up, it put me in mind of Milton's darkness visible ; for the lights of the flambeaux served only to show us the thick gloom that surrounded us. They had the appearance of lanthorns in a thick fog, where a small circle only is enlightened, and all beyond is invisible. Such is the general prospect of this dreadful hollow.

But what is still more striking, and fills the mind with the most awful ideas of the wonderful operations of nature, is the appearance of the stellactick pillars, with which the immense roof is seemingly supported. These pillars are formed by the continual droppings from the roof, which congeal like icicles, first at top, and embody themselves into the form of massy pillars in their descent, in the manner that I have endeavoured to represent them ; these in all probability have been forming from the beginning of time, and those of them that have reached the floor of the cavern, and now extend from bottom to top, have been thousands of years in arriving to that perfection.

Some begin to be visible that have extended themselves from the vast arch above, within the sphere of light that you carry with you below, and these seem suspended in the air, and ready to fall upon your head as you pass underneath. The most perfect of these pillars have breaches in them, as if eaten out by some corrosive substance, as may be seen at F. The congelations assume the form of tubes like the pipes of an organ, and when they are united, give the pillars the appearance of being fluted.

The drawing which I have annexed, though I am sensible of its imperfection, will give your readers some faint notion of this great natural curiosity, which so astonished me that I recollect the strange sensation with which I was affected at the sight of it with the most awful dread.

Explanation of the Plate.

A the entrance. B the first stellactick pillar. C a congelation forming from the floor. DD the appearance of the pillar from above. E the enlarged base of the most perfect of all the pillars. FF cavities in the sides of the rock. G the congelations as they are forming on the pillar.

[1772, pp. 518, 519.]

Having heard much of this wonderful curiosity in Nature, I was long ago desirous of seeing it, but never had the wished-for opportunity till in the beginning of October, when my business led me through that part of the country where it is; and the following account is the best I can give, from short notes taken down in the different parts of it, as my conductor or guide informed me, who seemed to be very intelligent, and behaved with the greatest degree of civility.

The entrance into this complicated cavern is through an almost regular arch, 12 yards high, formed by Nature at the bottom of a rock, whose height is 87 yards. Immediately within this arch is a cavern of the same height, 40 yards wide, and above 100 in length. The roof of this place is flattish, all of solid rock, and looks dreadful overhead, because it has nothing but the natural side-walls to support it. A pack-thread manufactory is therein carried on by poor people, by the light that comes through the arch.

Towards the further end from the entrance the roof comes down with a gradual slope to about two feet from the surface of a water 14 yards over, the rock, in that place, forming a kind of arch, under which I was pushed, by my guide, across the water, in a long oval tub, as I lay on my back in straw, with a candle in my hand, and was, for the greatest part of the way on the river, so near the arched roof that it touched my hat if I raised my head but two inches from the straw on which I lay in the tub (called the boat), which, I believe, was not above a foot in depth.

When landed on the further side of this water, and helped out of the boat by my guide, I was conducted through a low place into a cavern 70 yards wide and 40 yards high, in the top of which are several openings upwards, reaching so high that I could not see to their tops. On one side of this place I saw several young lads, with candles in their hands, clambering up a very rough stony ascent, and they disappeared when about halfway up. I asked my guide who they were, and he told me they were the singers.

At 87 yards from the first water I came to a second, $9\frac{1}{2}$ yards broad, over which my guide carried me on his back. I then went under three natural arches, at some distance from one another, and all of them pretty regular; then entered a third cavern, called Roger Rain's house, because there is a continual dropping at one side of it like a moderate rain. I no sooner entered that cavern than I was agreeably surprised by a melodious singing, which seemed to echo from all sides; and, on looking back, I saw the above-mentioned lads in a large round opening called the Chancel, 19 yards above the bottom where I stood.

At the top of a steep, rugged, stony ascent, on one side of this cavern, I saw a small irregular hole, and asked my guide whether there was another cavern beyond it. He told me there was; but that very few people ventured to go through into it, on account of the frightful appearance at the top of the hole, where the stones seemed to be almost loose, as if ready to fall and close up the passage. I told him that if he would venture through I would follow him; so I did, creeping flat, the place being rather too low to go on all fours. We then got into a long, narrow, irregular, and very high cavern, which has surprising openings of various shapes at top too high to see how far they reach.

We returned through the hole into Roger Rain's house again, and from thence went down 50 yards lower on wet sand, wherein steps are made for convenience; at the bottom of which we entered into a cavern called the Devil's cellar, in which,

my guide told me, there had been many bowls of good rum punch made and drank, the water having been heated by a fire occasionally made there for that purpose. In the roof of this cellar is a large opening, through which the smoke of the fire ascends, and has been seen, by the people above ground, to go out at the top of the rock. But this opening is so irregular and crooked, that no stone let down into it from the top was ever known to fall quite through into the cavern.

From this place I was conducted a good way onward, under a roof too low to let one walk upright, and then entered a cavern called the Bell, because the top of it is shaped somewhat like the side of a bell. From thence I was conducted through a very low place into a higher, in the bottom of which runs a third water; and the roof of that place slopes gradually downward, till it comes within 5 inches of the surface of the running water under it. My guide then told me that I was just 207 yards below the surface of the ground, and 750 yards from the first entrance into the rock, and there was no going any further. Throughout the whole I found the air very agreeable, and warm enough to bring on a moderate perspiration, although, in less than a fortnight before, all the caverns beyond the first river (where I was ferried under the low arch) had been filled to a considerable height with water, during a flood occasioned by great and long-continued rains.

JAMES FERGUSON.

The following is a tabular statement showing the caves mentioned in the *Gentleman's Magazine*, and those described in Professor Boyd Dawkins' *Cave Hunting* and Buckland's *Reliquiae Diluvianæ* :—

Name and locality of Cave.	Date of notice in the <i>Gentleman's Magazine</i> .	Page in this volume.	Page in Dawkins' "Cave Hunting."	Page in Buckland's "Reliquiae Diluvianæ."
The Dropping Cove, at Slaines, North Scotland	1770	306-7		
At Castletown, Derbyshire	1771	307-8	34	
Near Nottingham	1785	22		
Burrington Comb, in Somersetshire	1805	22, 23	140	
Burcott, in Worfield, Salop.....	1810	23		
Spaxton, near Bridgewater	1817	306		
Kirkdale, Yorks	1822	24-26		1-48
Yattendon, Berks	1822	26	279-284	
Seaham Dene, Durham	1823	27		
Banwell, Somersetshire	1824	27, 28	293	
Uphill Hill, Somersetshire	1827	28	294	
Clifton Down, Gloucestershire.....	1828	29		60
Dunolly in Argyleshire	1828	[190		
Blackdown Hills, Devon	1831	29-31		
Tinwell, near Stamford	1835	29		
Skye	1841	175		
Near Laughearn	1842	193		
Poltalloch	1863	33, 34		
Ireland, near Cork	1865	295		
Near Tilbury	1867	31-33		

4 (page 34). Besides Stuart's *Sculptured Stones of Scotland*, referred to in the text, it should be noted that Sir J. Y. Simpson gave in 1867 a special description on this subject—*Account of some Ancient Sculptures on the walls of Caves in Fife*. 410.

5 (page 34). I cannot discover that any additional information was forthcoming.

6 (page 65). This article is printed in the succeeding section. See pp. 201-217.

7 (page 66). This article is printed in the succeeding section of this volume. The reference will be found on p. 212.

8 (page 77). There have been many attempts to forge flint implements, the most recent and glaring example being that recorded by Mr. Worthington G. Smith, in his paper on the "Palæolithic Floor at North-East London," in the *Journal of the Anthropological Institute*, vol. xiii., pp. 357-386.

9 (page 90). This is described in a paper giving an account of "Two Days in Cornwall with the Cambrian Archaeological Association," 1864, part i., pp. 311-315. The description is as follows, and it is accompanied by an illustration :

"The hut consists of two chambers, one circular, 13 feet in diameter, the other rectangular, 9 by 7 feet; with a communicating doorway, B on the plan, measuring 4 feet high by 3 feet 9 inches in breadth. The principal entrance, A, 5 feet 6 inches high and 2 feet wide, has a lintel composed of three slabs of granite. C marks another entrance only 2 feet 7 inches high, and 2 feet 3 inches wide; one lintel stone remains, but there were evidently others, for the outer facing of the wall on this side has suffered much injury, many of the stones having been carried away. At H the wall has been broken through, thus affording a good section, and showing the mode of construction. All the stones—large blocks of granite—used in this structure appear to have been selected with much care. In the circular chamber each course overlaps that beneath, and the stones at the height of 5 feet project inwardly 3 feet beyond those at the base, as shown by fig. 1 in the annexed woodcut, and appears to have thus continued until a perfect dome was formed; the roof has fallen in, and the present height of the wall is from 5 to 6 feet. The masonry over the doorway, B, is stepped over towards both chambers (see fig. 2), but the remaining three sides of the rectangular one consist of perpendicular walling to the height of 7 feet, without showing any indication of the manner in which the roof was formed. It was thought at first that the rectangular chamber was of later date, but on more careful examination this was not found to be the case, and there can be no doubt that the whole building was constructed at the same time. In the end of the rectangular chamber, 5 feet from the ground, is a small window, which, as regards structures of this kind, Mr. Barnwell considers to be unique in England and Wales :—

"For although Tref Caerau in Caernarvonshire may still retain a doorway in the outer defences, yet no other instance of a window is known. Even in the more numerous and perfect specimens of such buildings in the west of Ireland (for an excellent account of which see Mr. Dunoyer's article in the "Archæological Journal," vol. xv.) only one window is figured in Plate IV. of the article referred to, and it appears to have been much more carefully and neatly executed than the one at Bosphrennis.*

"The masonry of the side walls of the inner chamber appears to have been executed with much greater care and regularity than the end in which the window occurs. At F and E are low platforms about 18 inches in height, and at G three steps in the hedge. The use of these platforms is not apparent, neither is it evident what purpose the great thickness of the south-west wall could have served.

* *Archæologia Cambrensis*, Third Series, No. xxxiv.

On the opposite side, it will be observed, the wall externally follows the shape of the chambers, whilst here there is, to all appearance, a solid mass of earth between the two facings. At present there is not known to exist in Cornwall any other building of the period to which this is assigned to be compared with it. The interesting bee-hive huts of Roughtor and Brown Willy, described by Sir Gardner Wilkinson, are of a different character. One of the gentlemen present stated that if he had seen this building of a round and rectangular chamber in Ireland he should have called it an oratory—a place in which some religious man established himself and had a little chapel attached. Whatever may have been its use, the striking resemblance of this building to those in Ireland seems to afford another proof of the connection which existed between the two countries at an early period. This bee-hive hut stands in the angle of a small enclosure, the hedges of which are built of the stones which at one time formed other similar structures, and which were destroyed by a former tenant, but within the remembrance of the person now occupying the estate. In an adjoining field are the remains of the foundations of rectangular chambers surrounded by a rudely constructed circle, and at the distance of a few hundred yards, among furze and heath, are traces of circular enclosures resembling those at Chysauster.

"After having examined the bee-hive hut, we retraced our steps through a few fields to the side of a little stream, the course of which we followed for a short distance, then directed our way to a croft on the left, and came on the fallen cromlech of Bosphrennis. It consisted of four supporters 3 feet 6 inches high, forming a complete kistvaen 6 feet by 3, and what is very remarkable, the covering-stone is circular, measuring 4 feet 10 inches in diameter, and 5 inches thick. The stone must certainly have been wrought into this form, and it seems to afford the only known instance of the kind. It was suggested that it was made circular in modern times—in fact, that the cromlech was pulled down for this stone—and that after it had been shaped it was found useless for the purpose required. But, after all, it scarcely seems likely that any one would be at the labour of rounding a large piece of granite without first ascertaining whether it was of suitable dimensions and quality. Though—owing to the rough character of the intervening ground—we had to proceed on a roundabout course, this cromlech is no more than about 500 yards from the bee-hive hut."

10 (page 104). I cannot identify this letter from R. C. H.—of course the well-known antiquary Sir Richard Colt Hoare. It is probably an incidental reference made in one of his many communications to the *Gentleman's Magazine*.

11 (page 114). Canon Greenwell has since published, in conjunction with Professor Rolleston, his celebrated work, *British Barrows, an Examination of Sepulchral Mounds*, 8vo., 1877.

12 (page 122). This work has never been published under the title here given, but it probably was superseded by the valuable work referred to in the previous note.

13 (page 123). This account of horse burial originated no doubt as suggested in the text, and in mediæval times; but it is well worth a place in this volume, on account of the discovery lately of the burial of horses with a chieftain, which appeared in the Proceedings of the Society of Antiquaries, 1885. It may also be noted that in the *Gentleman's Magazine*, 1823, Part II., p. 76, the following note occurs:—

"The complete carcase of a horse, in a standing posture, was lately found in Eaglesfield peat-moss, where it must have been some centuries. The animal was unshod, and, by the teeth, about four years old." And in 1856, Part I., p. 69, a letter signed M. A. D. [query M. A. Denham] reports that during the railway operations in the townships of Piersebridge and Carlebury several human skeletons

have been exhumed, one of which was blended with the bones of a horse, and judging from the short stiff horns of the animal, those of a young bullock. In the third grave the workmen found a couple of lathe-turned vessels on the breast, as they said, of the skeleton. In September, during the excavations in the township of Carlebury, and about 100 yards to the east of the station, other six human skeletons were disinterred. With one of the bodies buried north and south the remains of a horse were found, which had been buried alongside those of its master. Around the neck of another of the above skeletons a torque, or ring, nearly $4\frac{3}{4}$ inches in diameter, formed of plain copper wire, was discovered.

14 (page 136). This paper is on "Roman Antiquities at Medbourn, Lincolnshire," and will be printed in the volume on *Roman Archaeology*.

15 (page 138). I cannot discover that anything further is described about this tumulus.

16 (page 142). A great many communications were printed on this subject, but none of them worth reprinting. They are as follows: 1789, Part II., pp. 605, 606; 1792, Part II., pp. 1082-1084, 1181-1183.

17 (page 147). This should be August, 1763, p. 396. The letter is as follows: "The South-downs near this place abound very much with those lasting monuments of antiquity, the barrows or tumuli of our ancestors, either British, Roman, or Danish, or perhaps all of them, the chiefest part of which are of a bell fashion, with a sink in the middle; some are double, some single, others treble; some few there are of the long kind: one in particular, at Aldfriston, is 55 yards long, with three sinks, one at each end, and one in the middle with a deep ditch on each side, from whence the earth was thrown that composes it. A gentleman at Aldfriston had the curiosity to have one of the circular ones opened a few weeks since, and accordingly began on the south side, and at a few feet in, found the skeleton of a man lying on his side in a contracted form, with his head to the west. The bones were very firm and hard, owing to the nature of the ground on which they lay, which was a bed of chalk. During the course of digging were found ten knives of different make, iron spikes, charcoal, a thin piece of yellow metal, bones of brute animals, etc. In the middle, under a pyramid of flints, were found an urn holding about a gallon, full of burnt bones and ashes; it was carefully placed on the chalk rock, with about 4 feet of earth over it, was of unbaked clay, and had some rude ornaments on the verge of it. Mr. Lucas, of Aldfriston, is in possession of it, with the knives, etc."

18 (page 258). This is a report of a meeting of the Kilkenny Archaeological Society, and the following passage relates to the subject referred to in the text:—

"A report by Robert Malcolmson, Esq., on a kitchen midden recently discovered near Carlow, was then read, of which the following are the chief points:—

"On the part of John Cooper Shaw, Esq., of Ardnehue Lodge, in the County of Carlow, I send for exhibition a number of antiquities recently discovered, under the following circumstances:—

"Ardnehue is situated in the parish of Killerrig, in the barony and County of Carlow, and is distant about three miles from the county town, on the road leading from it to Hacketstown, and is on the estate of the representatives of the late Lord Downes. Early in the spring of the present year, Mr. Shaw, whilst searching for limestone gravel on a field upon his farm next adjoining his residence at Ardnehue, observed, at a particular spot where the surface had been removed, that the subsoil was of a 'darker, richer, and softer' description than the surrounding earth, and occasional fragments of bones presenting themselves. Mr. Shaw was induced to undertake the excavation of the loamy soil there discovered, and in the prosecution of that work it was found that this stratum filled what had evidently been a trench or series of trenches of angular curved shape, with occasional off-shoots of minor extent. The soil or earth which has been removed from this deposit is calculated by Mr. Shaw to have amounted to six or seven

hundred cart loads, the whole having been found interspersed with animal bones to a considerable extent. These were carefully picked and laid aside; and a number of them having been submitted to the anatomical observation of Mr. William Pallin, V.S., of Carlow, the following report was obtained from that gentleman:—

"The bones, which consisted of the remains of oxen, sheep, pigs, and goats, were principally composed of broken fragments of the articular ends of the bones of the extremities, with the remains of several heads, all more or less injured, and in most cases having only one horn, the other having been broken off close to the root. A fractured depression in the centre of the forehead denoted that death was produced by a blow from some heavy instrument. From the size of the head the breed to which they belonged must have been very large, more particularly that of the oxen, with a strong, wide frontal bone, and straight projecting horns, and in some instances, where the teeth remained perfect, which was well seen in the sheep and pig, proved that the animal was, in each case, fully grown.

"The bones belonging to the oxen were principally the ends of femurs, fore and hind cannon bones, and a few vertebrae; those of the sheep were principally ribs and bones of the extremities; and those of the pig upper and lower jaw-bones. There were also two coffin or foot bones belonging to a small horse, but from their difference in size must have been from different animals. Although the bones must have been under ground for centuries, they were in perfect preservation, which probably depended on the antiseptic properties of the earth around them."

"The earth or soil excavated has been used by Mr. Shaw as a manure, with the best results.

"Besides the bones of the quadrupeds indicated by Mr. Pallin, the skull of a dog and the remains of fowls were discovered. No human remains, however, were met with, save the under jaw and teeth of a skeleton, but this was not found in such proximity with the other bones, or in such a position as to lead Mr. Shaw to think that it was in any way connected with the 'kitchen midden' in question, but is rather supposed to have been accidentally brought there in the process of tillage or manuring the farm, as an adjoining field is reported to have been, in very distant times, the site of a burial-ground. In addition to these bones, of which an average specimen of the different sorts is sent for exhibition, in the removal of the soil from the trenches or cavities, which at some points descended to a depth of 8 or 10 feet below the surface of the field, and measured in breadth from 1 or 2 to 5 or 6 feet, four out of the seven stone celts forwarded by Mr. Shaw were discovered. These I have ticketed, and numbered respectively 1, 2, 3, and 4. Two of them, I fancy, will be pronounced by the Society to be unique in shape and appearance—the large flat stone implement with the circular extremity, rough sides, and polished edges,* measuring $10\frac{1}{2}$ inches by 3, and 1 inch thick (No. 1), and the perfectly lozenge-shaped celt or hammer, measuring $10\frac{1}{2}$ inches long, by 3 inches across the lozenge, and $1\frac{1}{2}$ inches in thickness (No. 2);† and all of them are evidently of the rudest and most primitive age, and each of a different description of stone, though I am not mineralogist enough to determine their precise composition or lithological characters. At the bottom of the trench, in two or three distinct places, stones were found in such a position, and such unmistakable traces of charcoal or wood ashes were discerned, with here and there a 'clinker,' as to

* "This celt-shaped stone has all the appearance of having been grasped in the hand for use, hence the polished edges from constant practice. It may have served for crushing corn, as its flat end is blunt, and shows marks of wear and tear when used as a pounding instrument."

† "This stone hammer would have served most admirably to fell the oxen, the perforations in the heads of which must have been made by it or a similar weapon."

leave no doubt they had formed fireplaces. The disjointed remains of a quern, or hand-mill, were discovered, consisting of the upper stone or convex muller of a grain rubber, exactly such as is figured in Wilde's 'Catalogue of the Royal Irish Academy' (stone, earthen, and vegetable materials), p. 104, fig. 82, No. 2. Two or three bone pins, or hodkins, also turned up in the excavation; and the fragment of a two-sided hand-comb (No. 5), found about 2 feet from the surface, is sent by Mr. Shaw, with one of the bone pins. This hodkin (No. 6) measures $3\frac{1}{2}$ inches, is sharp pointed, and polished with a flat head pierced, having a hole for the evident purpose of its employment as a packing needle. Some rusted iron remains were found. One of these—probably a meat-hook—is included in the articles sent (No. 7), but it has been renewed in the forge since its discovery. A small curiously shaped iron knife-blade (No. 8) is also forwarded. It is 2 inches long in the blade, and $\frac{3}{8}$ in the tang.*

"Such are, I believe, the only remnants of the rude arts of past ages which have as yet been discovered in the 'diggings.' Much more of the soil remains for future removal, and Mr. Shaw, who purposes continuing his explorations after harvest, will husband any further discoveries as carefully and thoughtfully as he has already done.

"There was nothing in the surface or appearance of the field to indicate the existence of this 'kitchen midden.' No mound, rath, or embankment can be traced, from observation or tradition, as having ever existed on the spot, which is situated on the gentle and natural slope of a hill, in a field which has been in cultivation apparently for ages.

"The stone celts marked respectively A, B, and C, and the portion of a sword-saberd with gold casing (D), were found in different parts of the adjoining land by Mr. Shaw."

19 (page 264). This refers to a report of a meeting of the Berwickshire Naturalists' Club, the following passage being illustrative of the matter referred to in the text.

[*October, 1862, p. 455.*]

Aug. 15.—A party of members of the Berwickshire Naturalists' Club and their friends visited Yeavering Bell, for the purpose of examining the remains of ancient habitations, fortifications, and burial-places that exist upon the mountain, and which have been recently opened out. Yeavering Bell is a bold, insulated hill, on the north of the Cheviot range, rising to the height of about 1,500 feet. It has long been known that its summit had been fortified at an early period, and that its flanks and the various valleys communicating with it were covered with the remains of ancient buildings. It is the property of F. Sitwell, Esq., by whose permission the explorations have been made. The excavations have been conducted by Mr. Coulson, under the direction of George Tate, Esq., F.G.S., Secretary to the Club, at the expense of his Grace the Duke of Northumberland. The Vicar of Wooler, the Rev. J. S. Green, received the members at the vicarage house with much hospitality. On leaving the vicarage after breakfast, the party, numbering nearly thirty, was augmented by the arrival of Professor Simpson, Edinburgh, and the Rev. A. Stewart Killin, Argyleshire. At Yeavering the various conveyances were discarded, and the ascent of the Bell, which was swathed in mist, was commenced on foot.

It seems that the whole of this district, wherever the ground is sufficiently elevated as to be thoroughly dry, is covered with buildings. The country must at these far distant periods have been much more thickly inhabited than at present. Many of the hills have been formed into terraces, the mode of cultivation then practised. In speaking upon this subject, Mr. Tate said that upon Heethpool he had counted sixteen terraces, rising in succession one above the other, many of them having a platform of about 20 feet in width, and that this mode of cultivation

* "This seems to have been a penknife, as the point is so formed as to be admirably adapted for scraping or erasing on parchment."

was in some instances resorted to on hills that rose about 1,000 feet above the level of the sea.

Mr. Tate first led the way to the excavation at the lowest elevation—Wormlaw. This was a transverse cutting, where, at the point of intersection, a cist was found. The cist consisted of slab-shaped stones placed edgewise round a quadrangular space. There was no cover. Within a few bones were found preserved, some flints, a few pieces of iron slag, and fragments of coarse pottery. A short discussion took place by the side of this old-world tomb. As the size of the enclosure did not permit of the supposition that the dead had been buried at full length, Mr. Tate explained that in the earliest form of burial the body was folded up; but in a later period, to which he believed this example belonged, cremation was resorted to. In elucidation of the theory that the cause of death influenced the preservation or decay of the remains, Professor Simpson related that he had been present at the opening of the grave of a person who had died of the plague, in which every trace of the dead had disappeared—no particle remaining save a fragment of the coffin-lid handing down the name of the deceased. In the earth cast up around the cist, Mr. Wightman, of Wooler, found a flint, and other gentlemen also picked up relics of the period. On the hillside in its neighbourhood there was an abundance of nettles, a sure sign of human habitation.

Moving away from this point of interest, the *cicerone* penetrated the mist in an upward direction, and was closely followed by the whole party, as it was evident to all that to be left a few paces behind was to be lost on the hillside. Grouping round the different fortlets at various elevations, the ancient manner of building was examined by the Club with much curiosity. Great stress appears then, as in all early ages, to have been placed on the value of thick walls; and the circular form seems to have been adapted for most structures. Three or four courses of very large stones, arranged in a circle 10 or 12 feet in thickness, formed the groundwork upon which the walls, made of smaller stones, were raised to a height of about 7 feet. In the instance of one fort, a circle of this description was 30 feet in diameter. Within it, also built in circles, were the habitations of those who defended them. In towns, or large assemblages of the same huts, the diameter of the circumvallation was correspondingly greater. Encircling the summit of the Bell, a strong wall of the kind mentioned enclosed a space of twelve acres. There is no evidence, *in situ*, to prove the materials of which roofs were constructed. On account of this absence of proof, bygone antiquaries assumed that they must have been made of a rude perishable thatch. But this seems scarcely probable. In the island of Uig, ancient stone huts of this description are still occupied, in the summer time, by the hardy and scant population; and these huts are roofed, conically, with flags of stone. As stone was in abundance on the spot, we may conclude it would be used, by a people who prized strength and security, in preference to a fragile and combustible material like thatch. The entrance of one fortlet is divided into two by a large upright stone, placed jambwise in the centre of it; and in the thickness of the wall, to the right of this entrance, there is a guard-chamber.

The wall which encircles the platform forming the top of the hill is of rude structure. Large stones have been laid in order for about two courses to form the foundation, and smaller ones are heaped upon them without any attention to particular arrangement. The wall has been 10 or 12 feet broad at the base, tapering off as it rises; its height may have been about 7 feet. Inside the fortress, near its northern entrance, is a second enclosure surrounded by a rampart and ditch of its own. This inner part would be the place of greatest security. The ditch has been cleared. It is partly excavated out of the rock; and, curiously enough, charred wood was found in the bottom of it. Nothing was found to justify the idea entertained by the older antiquaries that this was a Druids' temple. Several circular dwellings which were partly formed by excavation have been cleared. Nothing of importance, except a few relics, which will be presently noticed, was found. The Secretary was of opinion that this was simply the innermost retreat, into which the

tribe fled for safety on notice of attack. It is possible that it may have been the stronghold in which the warriors placed their wives and children on such emergencies, as it would not be occupied as a matter of choice, for the fatigue of ascent, carrying water and provisions, would have been excessive. The ancient Britons were not unacquainted with the convenience of good roads. A long length of track-way, leading from the base of the hill to the forts near the summit, disclosed their mode of road-making. The track was excavated, and the earth taken out was thrown up on either side, forming embankments, which were strengthened with stone-work. The examination of one hut circle revealed two successive occupations. A foot and a half below the surface fragments of pottery with a yellow glaze, and a piece of lead, were found. These objects indicate residence in the Romano-British period. Four feet below the surface, the explorers came to flints, slag, and bones—evidences of Celtic pre-occupation. These facts are exceedingly interesting in more ways than one. Assuming that this hut was deserted about the time of the advance of the Roman legions, they would go to show that in the four or more centuries which elapsed before it was again inhabited, a covering of soil $2\frac{1}{2}$ feet deep had accrued. This furnishes data for the exhumation of buried antiquities generally, and leads us to consider that, in the lapse of a thousand years, it need scarcely be a matter of surprise that all evidence of roofing, always the first part of a ruinous building to fall, should have disappeared.

The general impression gained of the ancient people by the day's investigations pictures them as thickly populating the Cheviot district; living in circular huts constructed of stone; protected by circular stone walls; growing corn on terraces on the hill sides, above the flooded valleys; burning wood for fuel; using coarse pottery for household purposes; and flint-headed arrows; not altogether ignorant of the use of metals—fighting with iron-headed spears; hardy, vigilant, and warlike.

The party now descended the west side of the hill, and examined some very marked lines of entrenchment which have not yet been excavated. One of them has a double rampart, and is of quadrangular shape.

The Club next made for Old Yeavering, for the purpose of viewing a building of a later era—the reputed palace of King Edwin. This is a low, oblong, quadrangular building, now occupied as a hind's cottage. A few courses of large stones at the base of the masonry, and a fragment of walling built up with the modern superstructure, are the only evidences of a very early building, except the strength of the walls, which are 5 feet thick. In the account of the life and labours of Paulinus, Bede mentions that he came with the King and Queen to the royal country seat, which is called Adgefrin (Yeavering), and stayed there with them thirty-six days, fully occupied catechizing and baptizing; during which days, from morning to night, he did nothing else but instruct the people, resorting from all villages and places, in Christ's saving word; and, when instructed, he washed them with the water of absolution in the river Glen, which is close by. This town, he adds, under the following kings was abandoned, and another was built instead of it at the place called Melmin (Millfield). This account favours our acceptance of the tradition that the ancient masonry indicated formed part of the country palace of the Christian king, and it can only be a matter of regret that so small a portion remains of it.

The Club returned to Wooler to dine together. After dinner, at which Mr. Langlands presided, in consequence of the President (Mr. Boyd, of Hetton) having been obliged to take his leave before the company sat down, the Secretary exhibited the relics found during the course of the explorations. There were, in addition to the articles already named, some millstones, a quantity of pottery, some fragments of armlets, formed apparently of oak, several sharpening stones, and a portion of an armlet of variegated glass of peculiarly excellent manufacture. Much of the pottery was coarse; other fragments were finer in texture, and of more elegant shape. The finer kinds were found at a higher level than the others, and are thought to have been formed after the Roman model. No doubt the presence

of the Romans would have an influence upon such of the Britons as submitted to their rule. The glass armlet was thought to be an importation. Some of the pottery had a glaze upon it. This is a very unusual thing in encampments supposed to be of the Celtic era, though one instance of it had occurred. Mr. Mason, of Pallinsburn, also exhibited weapons found at Old Yeavering.

20 (page 266). No further communication appears to have been sent upon this camp.

21 (page 272). This refers to a report of a meeting of the Cambrian Archaeological Society, the following passage illustrating the text :—

[*October, 1852, p. 405.*]

"At an evening meeting Mr. Moggridge described a cruciform mound at Margam in Glamorganshire; and Viscount Dungannon read an account of excavations which he has recently caused to be made at Valle Crucis Abbey, Denbighshire. Several objects of interest were discovered, and among them a tomb, the inscription of which bore the very early date of 1292. His lordship, before concluding his paper, expressed a hope that the noble owner of Ludlow Castle (Earl Powis) would permit excavations to be made therein; and the President said he should convey the suggestion to the proper quarter, and there was no doubt that such excavations would be permitted.

22 (p. 284). This subject has been much discussed by the members of the Somerset Archaeological Society, Mr. T. Kerslake taking the view that the Penselwood pits are relics of early occupation, and the Rev. H. H. Winwood thinking they are remains of quarries made for the purpose of obtaining stones for querns and other purposes. When the two parties had failed to convince each other, General Pitt Rivers, inspector of ancient monuments in Great Britain under the Ancient Monuments Bill, printed a "Report on Excavations in the Pen pits, near Penselwood, Somerset," and he decides entirely in favour of Mr. Winwood.

23 (p. 288). I may refer to my work, *Primitive Folk-moots, or Open-air Assemblies in Great Britain*, for an explanation of this interesting subject. The contents of the following chapters illustrate the great scope to which this phase of early life extends :—Chapter III.—The Evidence of Early English Records: Historical Value of this Evidence—Beda—Anglo-Saxon Chronicle—Codex Diplomaticus—Council on the Banks of the River Nodder—On the Banks of the Nidd—On the Humber—King Edgar's Charter to Ely—Welsh Examples—Cuckhamsley Hill—Bridge at Grantebrugge—Infra cimiterium Eliensis—On the Tyne. Chapter IV.—The Revival of the Primitive Form: Historical Value of the Revival—Evidence of the National Assembly reviving its Old Open-air Meetings: Mr. Freeman's Examples, Runnymede—The Local Assembly: Pennenden Heath, Shire-moot of Berks, Mendip—Summary. Chapter V.—The Historical Survival in England: Sources of Evidence—Historical Value of the Survival—Tynwald, Isle of Man—Its Initial Importance—Gorseddau of Wales—The Hundred Courts: Of Norfolk, Stone in Somersetshire, Alwicke and Younsmere in Sussex, Swanborough in Wilts, of Warwickshire—Mining Courts: Stannary Courts of Cornwall, Derbyshire Barnetote—Court of Dens in Kent—Forest Courts: Hesketh in Cumberland, Belbroughton in Worcestershire—Charnwood, Knaresborough—Manorial Courts: Their Primitive Origin—Pamber, Rochford, Somerton, Warnham, Dunstone, Kingsborough, Guernsey, etc.—Municipal Boroughs: High Wycombe, Lostwithiel, Bishop's Castle, Hastings, Dover, London, etc.—Summary. Chapter VI.—Open-air Courts in Scotland: Orkney and Shetland—Scone—Barony of Langforgrund—Strathern—Crieff—Liston—Torbolton—Dunning—Ellon—Hawick—Badenach—Cupar—Conan—Aberdeen—Cluny—Birlaw Court. Chapter VII.—Traditional and Philological Evidence: Historical Value of this Evidence—

Allusion in old Writers—in Folk-tales—*Shire-moot*: Shire Oaks, Nottinghamshire, Staffordshire, Shyrack, Sheriff Muir in Cumberland, Town Names, etc.—*Hundred-moot*: Of Dorset, Yorkshire, Sussex, Worcestershire, Norfolk, Kent, Notts, Lincolnshire, Lancashire, Northamptonshire, Surrey, Cheshire, Middlesex, Oxon, Herefordshire, Staffordshire, Warwickshire—General Value of the Evidence of Open-air Shire and Hundred-moots—Some Circles of Stones—Moot Barrows—Moot Hills—Hill of Banners—Place Names connected with Moot Hills—Place Names connected with Tingwalls—Courts of Ridings—Hustings Court—Field Names—Trees. Chapter VIII.—Evidence of Place Names and Traditions in Scotland: Old Traditional Rhymes—Some Circles of Stones—Moot Hills—Law Hills—Court Hills—Gallows Hills—Other names.





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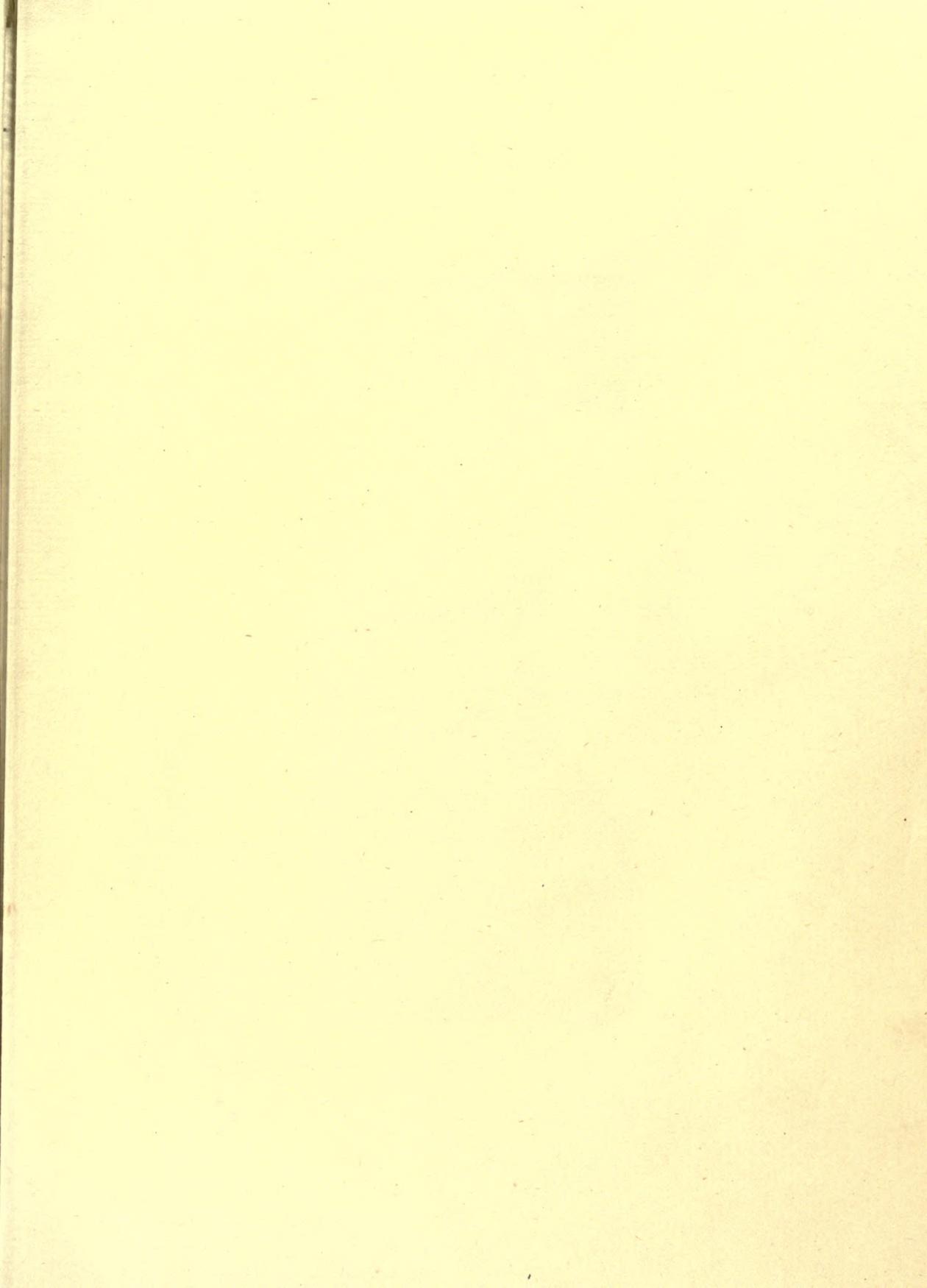
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